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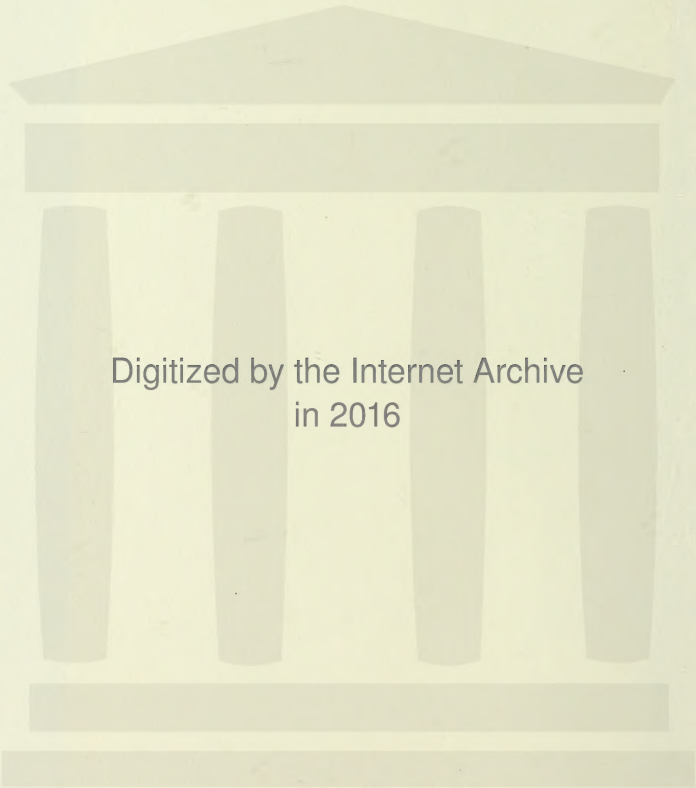

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THE

# JOURNAL OF PROCEEDINGS AND ADDRESSES

OF THE

# NATIONAL EDUCATIONAL ASSOCIATION,

SESSION OF THE YEAR 1885,

AT

## SARATOGA SPRINGS, N. Y.

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PUBLISHED BY THE ASSOCIATION.

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# THE NATIONAL EDUCATIONAL ASSOCIATION.

## FIRST DAY'S PROCEEDINGS.

### TUESDAY, JULY 14.

THE twenty-fifth annual meeting of the National Educational Association met in the First Methodist Church at 8 o'clock P.M. President F. Louis Soldan in the chair. The divine blessing was invoked by Rev. Dr. S. V. Leech, pastor of the church.

Dr. David Murray, Secretary of the New York State Board of Regents, made an eloquent and hearty address of welcome to the Association on behalf of the State.

Superintendent Geo. T. Church, of Saratoga Springs, spoke in behalf of the President of the village and also of the citizens of Saratoga, and in most fitting terms bid the Association welcome. President Soldan briefly returned hearty thanks for the cordial words of welcome extended by the representatives both of State and village.

Hon. B. A. Hinsdale, superintendent of schools of Cleveland, Ohio, and Dr. John D. Philbrick of Massachusetts in fitting words responded to the welcome as representatives of the Association.

The Secretary, at the request of the President, read a letter from the President of the United States regretting that his official duties alone prevented his attendance upon the meetings of the Association.

Prof. Wilson was then introduced, who read the first paper on "The Ideal Schoolmaster," prepared by General Thomas J. Morgan, of Providence, R. I., who was absent.

The paper was ordered read by a vote of the Association. Thomas W. Bicknell, LL.D., who was announced to open the discussion, declined to enter upon the discussion on account of the lateness of the hour. He offered some words of congratulation to the President and to the members of the Association.

Prof. E. E. Smith, of Lafayette, Ind., was, on motion of W. E. Sheldon, chosen Assistant Secretary.

After the usual formal announcements of the President for the meetings of the day, the Association adjourned.

## SECOND DAY'S PROCEEDINGS.

### WEDNESDAY MORNING.

The Association was called to order at 9.15 A.M. by the President, and opened with prayer by Rev. R. F. McMichael, of the Baptist Church.

The minutes of the evening previous were read by the Secretary of the Association and approved.

The President of the Association, F. Louis Soldan, Ph.D., delivered his inaugural address, which was of a very earnest and effective character, and which was received with frequent expressions of approval on the part of the Association.

The chair introduced to the Association J. W. Stearns, Ph.D., of Madison, Wis., who read the first paper of the session upon the subject: "The Common School and Morality."

Discussion of the paper, which, on motion, was limited to ten minutes' speeches, was participated in by Prof. G. Stanley Hall, Ph.D., of Baltimore, Ind., and by E. E. White, LL.D., of Cincinnati, O.

A recess of five minutes was taken.

After the recess, the chair announced that Henry Randall Waite, of Boston, Mass., who was to read a paper on Friday morning, could not be present at that time, and, on motion, he was given the time of the second paper, Dr. Hopkins not being present. Topic: "The Teachers' Tenure of Office."

The chair announced the following committees:

#### ON NOMINATION OF OFFICERS.

*Ohio, Chairman*, E. W. Coy,
*New Hampshire*, C. C. Rounds,
*Maine*, W. J. Corthell,
*Vermont*, A. E. Leavenworth,
*Massachusetts*, W. A. Mowry,
*Rhode Island*, Miss S. E. Doyle,
*Connecticut*, S. T. Dutton,
*New York*, Thomas Hunter,
*Pennsylvania*, J. P. Wickersham,
*New Jersey*, W. N. Barringer,
*Maryland*, Otto Fuchs,
*Dist. Columbia*, Z. Richards,
*Indiana*, J. W. Holcombe,
*Illinois*, Robert Allyn,
*Michigan*, J. M. B. Sill,
*Wisconsin*, J. W. Stearns,
*Iowa*, H. H. Seerly,
*Minnesota*, Irwin Shepard,
*Nebraska*, W. W. W. Jones,
*Kansas*, D. C. Tillotson,
*Colorado*, Aaron Gove,
*Missouri*, E. H. Long,
*Arkansas*, D. W. Edwards,
*Tennessee*, Miss Clara Conway,
*Louisiana*, E. E. Sheib.
*Texas*, J. M. Fendley,
*Georgia*, J. M. F. Erwin,
*Virginia*, J. D. Dreher,
*W. Virginia*, S. B. Brown,
*Dakota*, C. S. Richardson.

The other States and Territories were not represented in the Association.

ON RESOLUTIONS.

Thomas W. Bicknell, *Chairman*, E. J. James,
B. A. Hinsdale, Clara Conway.
W. H. Payne,

The discussion of the paper on "The Teachers' Tenure of Office" was participated in by W. A. Mowry, Ph.D., of Boston, and by Hon. John Hancock of Ohio.

Dr. E. E. White, President of The National Council of Education, presented and read the annual report of that body to the Association for the present year. The paper reads as follows :

## NATIONAL COUNCIL OF EDUCATION.

### PRESIDENT'S ANNUAL REPORT.

**To the National Educational Association**: The constitution of the National Council of Education makes it the duty of its president to report annually its work to the National Educational Association. In accordance with this provision I have the honor to submit the following statement of the work of the Council for the year 1884–85.

The plan of work reported last year, with a few modifications, has been continued, and the results accomplished are more satisfactory than in any previous year.

The annual meeting, held in connection with this meeting of the General Association, opened on Friday, July 10, at 10 A.M., and closed on Tuesday afternoon. Two daily sessions for the consideration of reports of committees, were held on Friday, Saturday, Monday, and Tuesday, and executive sessions were held on Saturday and Tuesday. Thirty-one of the fifty-one active members were present and four of the honorary members.

Six of the twelve standing committees submitted reports, as follows:

1. Committee on HYGIENE IN EDUCATION, on the topic of "Out-door School Recesses," by J. H. Hoose, Cortlandt, N. Y.

2. Committee on NORMAL EDUCATION, on "Practice Schools in connection with Normal Schools," by C. C. Rounds, Plymouth, N. H.

3. Committee on STATE SCHOOL SYSTEMS, on "State Supervision of Schools," by James H. Smart, Lafayette, Ind.

4. Committee on SECONDARY EDUCATION, on "Place and Function of the Academy," by William A. Mowry, Boston, Mass.

5. Committee on EDUCATIONAL LITERATURE, on "School Reports," by John D. Philbrick, Massachusetts.

6. Committee on EDUCATIONAL STATISTICS, on "Reforms in Educational Statistics," by Thomas W. Bicknell, Boston, Mass.

Reports (individual) were also made by William T. Harris, Concord, Mass., on "Methods of Pedagogical Inquiry," and by G. Stanley Hall, Baltimore, Md., on "Results of Pedagogical Inquiry."

These several reports were prepared with commendable care and they were discussed, with perhaps one exception, in a searching and thorough manner.

The plan adopted last year, of appointing members of the Council to report the gist of the discussions of the several reports, was continued with satisfactory results. These reports of discussions were all read to the Council and approved, and will be published in the volume of proceedings in connection with the reports to which they relate. This is believed to be an excellent feature of the Council's work—one that adds much to the value of its published proceedings.

The investigations of the Council now cover nearly the entire field of education. Its object is to formulate such conclusions as it may be able to reach, not as "final opinions," but as contributions to the results of educational inquiry. The Council assumes no authority, and issues no "dicta" on educational questions. Its conclusions are entitled to consideration, only so far as they are the results of full, impartial, and critical investigations of the questions involved.

At the meeting of the Council just closed, the constitution was so amended as to increase the number of active members from fifty-one to sixty, and to simplify the mode of their election. Hereafter all the members are to be elected by the Board of Directors of the Association and by the Council, the Board electing five members each year, and the Council five members. The members are so classified, that the terms of ten members will expire annually. The sixty members are divided into twelve standing committees of five members each. It is believed that sixty should be the maximum membership of the Council, and that no further increase in the number of active members should be made.

It must suffice to add, in conclusion, that the work of the Council becomes better defined and its possibilities of usefulness clearer, from year to year. The success of its fifth annual meeting increases the hope that the National Council of Education may not only be able to make some valuable contributions to the results of pedagogical inquiry, but that it may also assist in improving its methods.

Respectfully submitted,

E. E. WHITE,
*President of Council.*

SARATOGA, *July* 15, 1885.

The report was ordered filed.

The Association adjourned to meet at 8 o'clock P.M.

## Evening Session.

The Association was called to order at 8 o'clock P.M., by President Soldan, who made the following announcements:

1. That arrangements had been made whereby, through the distribution of slips by the local committee, the address of the different members might become known to those desiring to find them.

2. Concerning return checks over the railroads.

3. The following invitation from J. P. Haskins, for the Association to visit the Saratoga County Cabinet and Museum, comprising many interesting specimens in mineralogy, geology, palæontology, and archæology; also Revolutionary relics, and the fauna of the western part of the United States.

SARATOGA SPRINGS, *July* 15, 1885.

W. E. SHELDON, *Secretary of the National Educational Association.*

DEAR SIR: Wishing to promote the interest and pleasure of the members of your honorable body, during their session in Saratoga, I desire you to communicate an invitation to visit the Saratoga County Cabinet and Museum, located at Seltzer Building, Spring Avenue. It comprises many interesting specimens in mineralogy, geology, palæontology, archæology, Revolutionary relics, also the fauna of the western part of the United States.

Respectfully,

J. P. HASKINS.

The invitation was ordered filed, and the thanks of the Association tendered.

4. The following letter from the Hon. Henry W. Blair, of Manchester, N. H., explaining the causes of his unavoidable absence, and regretting his inability to deliver his address upon "Federal Aid to Education," was read by the Secretary.

MANCHESTER, N. H., *July* 8, 1885.

MY DEAR SIR: I am so worn down with labors, protracted now for several years without cessation, and especially for the last twelve months, that I am hardly able to get around from day to day, and find it impossible to concentrate my mind upon any work without the utmost difficulty. Rest has become an absolute necessity, and I cannot come to Saratoga. I had hoped to get in better trim, but it is of no use for me to think of it nor to attempt it. I know it to be an imposition almost, but if it would be taken in any other light, I would have mailed to the address of the members of the Association copies of my speech in opening the Senate debate which resulted in the passing of the bill providing temporary aid to common schools by the Senate. If this should be desired, you can send me a copy of the roll of the convention, and post-office addresses at their homes. The speech is principally valuable for the data it contains. I shall introduce the bill early next session, and shall hope for the urgent and powerful support of the Association—or rather, shall hope to be its instrument in securing the enactment of this very important measure into the law. Will you not emphasize the sentiment of the Convention in a suitable memorial or resolution to be presented to Congress at the December session? I venture to send you a copy of the speech referred to, that you may judge whether it is of any consequence.

My dear sir, I do not undervalue the great opportunity afforded me by your invitation to promote a cause which I have much at heart, nor the honor implied by your action. In the truest sense the educators of the country are its saviors. Every patriot must pray for the choicest blessings of Almighty God upon your mighty organization and its great work.

Truly and respectfully your obedient servant,

HENRY W. BLAIR.

To F. LOUIS SOLDAN, *Pres't Nat'l Ed. Ass'n.*

The minutes of the morning session were read and approved.

Dr. W. T. Harris, of Concord, Mass., was introduced to the Association by the President, and read his paper on "Psychological Inquiry."

It was ordered that the meeting close at 10 o'clock P.M.

Prof. E. H. Cook, of Potsdam, N. Y., presented the following res-

olution, which was read and referred to the Committee on Resolutions:

"*Resolved*, That, in view of the temptations to immorality and crime occasioned by the wide circulation of the *Police News* and other papers devoted to the records of vice and crime, or filled with seductive illustrations, this Association recommends the passage of a law in all our States, such as has been passed in Texas and Georgia and several other States, prohibiting the sale of such papers."

Discussion of Dr. Harris' paper on "Psychological Inquiry" was participated in by Lewis H. Jones, superintendent of schools, Indianapolis, Ind.; Mr. Denton J. Snyder, of Cincinnati, O.; Dr. G. Stanley Hall, of Baltimore, Md.; Dr. J. H. Hoose, of Cortlandt, N. Y.; Prof. W. N. Hailmann, of Laporte, Ind.; F. W. Dutton, of Northfield, Vt.; Brother Azarias, of Baltimore, Md.; and Dr. E. E. White, of Cincinnati, O.

The Association adjourned to 9 o'clock A.M., Thursday morning.

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## THIRD DAY'S PROCEEDINGS.

### THURSDAY MORNING.

The Association was called to order by the President, at 9 o'clock A.M., and opened with prayer by Hon. John Eaton, of Washington, D. C.

The minutes of the evening session of Wednesday were read and approved.

Rev. A. D. Mayo, of Boston, Mass., was presented to the Association by President Soldan in the place of Col. Parker, who was absent, and made an excellent address upon "Learning to Do by Doing."

Dr. B. G. Northrop, of Connecticut, moved to postpone discussion of the paper just read till after the presentation of Miss Conway's paper.

The reading of the second paper was ordered to begin at 10.15 o'clock A.M.

The chair called for the report of the Committee on Nominations, which was read as follows:

"The Committee on Nominations beg leave to report the following list for officers of the Association for the ensuing year:

NATIONAL EDUCATIONAL ASSOCIATION, 1885–6.

*President*, N. A. Calkins, of New York.
*Secretary*, W. E. Sheldon, of Mass.
*Treasurer*, E. C. Hewett, of Ill.

*Vice-Presidents*, F. Louis Soldan, of Missouri, S. T. Dutton, of Connecticut, James MacAlister, of Pennsylvania, L. D. Brown, of Ohio, Julius D. Dreher, of Virginia, S. M. Finger, of North Carolina, Edward E. Sheib, of Louisiana, J. Baldwin, of Texas, J. W. Stearns, of Wisconsin, J. L. Pickard, of Iowa, Z. Richards, of the District of Columbia, Ella C. Sabin, of Oregon.

*Counselors-at-large*, John Eaton, of the District of Columbia, E. E. White, of Ohio.

*Counselors*, W. J. Corthell, of Maine, C. C. Rounds, of New Hampshire, Justus Dartt, of Vermont, Sarah E. Doyle, of Rhode Island, Chas. D. Hine, of Connecticut, C. D. McLean, of New York, W. N. Barringer, of New Jersey, H. S. Jones, of Pennsylvania, G. Stanley Hall, of Maryland, S. C. Armstrong, of Virginia, S. B. Brown, of West Virginia, Chas. E. Taylor, of North Carolina, V. C. Dibble, of South Carolina, J. M. F. Irwin, of Georgia, Julia Tutweiler, of Alabama, J. R. Preston, of Mississippi, E. Nicholson, of Louisiana, O. V. Hayes, of Arkansas, Clara Conway, of Tennessee, W. D. Parker, of Wisconsin, R. D. Allen, of Kentucky, R. W. Stevenson, of Ohio, O. S. Westcott, of Illinois, S. S. Parr, of Indiana, Henry Sabin, of Iowa, Irwin Shepard, of Minnesota, J. S. Cowdon, of Florida, H. C. Speer, of Kansas, E. H. Long, of Missouri, W. W. W. Jones, of Nebraska, John Swett, of California, A. Gove, of Colorado, G. C. Hall, of Arizona, F. H. Crawford, of Oregon, J. M. Fendley, of Texas, J. S. Ingraham, of Washington Territory, J. M. Coyner, of Utah, W. H. H. Beadle, of Dakota, A. S. Nichols, of Montana, John Hitz, of District of Columbia, J. H. Covell, of Indian Territory, Chas. S. Young, of Nevada, Larkin Dunton, of Massachusetts, W. H. Payne, of Michigan.

All of which is respectfully submitted.

E. W. Coy,
*Chairman of Committee.*

The nominees of the Committee were elected by unanimous vote, after an expression of approval by Dr. Thos. W. Bicknell, who specially emphasized the fact of the placing in positions of trust of so many new men.

The discussion of Mr. Mayo's paper, limited to five minute speeches, was participated in by W. N. Hailmann, of La Porte, Ind., Z. Richards, of Washington, D. C., Dr. Edward Brooks, of Pennsylvania, and Mrs. D. C. Heath, of Boston.

Miss Clara Conway, of Memphis, Tenn., being introduced by the President, read a paper upon "The Child's Environment."

The ladies desiring to discuss this paper were, on motion, given fifteen minutes each.

Discussion of the paper was very earnest, and was participated in by Mrs. Delia A. Williams, of Delaware, O., Mrs. D. C. Heath, of Boston, Mass., Mr. S. T. Dutton, of New Haven, Conn., Mrs. Anna Randall Diehl, of New York City, and Miss Hattie N. Morris, of Brooklyn, N. Y.

A recess of a few minutes was taken.

Prof. E. E. Smith, of Lafayette, Ind., made the following motion, which was read for information and laid upon the table for future consideration :

*Whereas*, It is evident that the territory of the United States is too large to be embraced in the meetings of one Teachers' Association ; and

*Whereas*, The motto of all teachers' gatherings should be "The greatest good to the greatest number," and especially to that large majority of teachers whose pay is limited in amount; therefore be it

*Resolved*, That a committee of five be appointed by the chair to take into consideration and ascertain by correspondence or otherwise, the advisability of aiding in the organization of a limited number of co-operating, but self-regulating Teachers' Associations, in various portions of the United States. This committee to report at the next meeting of the National Association, one year from this time.

Prof. Charles K. Wead, of Ann Arbor, Mich., was introduced by the chair, and read his paper upon "The Teaching of Physics in the Common Schools."

In answer to queries, the President of the Association stated that all who take part in the meetings and discussions of the Association are expected to become members; and also that primary schools are not neglected, but discussed in the Association proper and in the Department of Elementary Instruction.

The discussion of Prof. Wead's paper was opened by Prof. A. H. Tuttle, of the Ohio State University, who was followed by Prof. W. N. Hailmann, of La Porte, Ind., and Prof. Jerome Allen, of New York.

On motion of Prof. A. H. Tuttle, the following recommendation of Prof. Wead's paper was adopted:

A committee of five experienced teachers should be appointed by the President elect, who may co-operate with any similar committees from other educational or scientific bodies, to consider, without disparagement of other studies, linguistic or scientific, how physico-teaching in our schools may be improved and made more uniform throughout the country.

The resolution of Prof. E. E. Smith was, on motion, taken from the table, and, after explanation of its purpose, referred to the Executive Committee.

Supt. B. A. Hinsdale, of Cleveland, Ohio, presented the following resolution, which was read and adopted:

*Resolved*, That the Executive Committee be instructed, in preparing the programme of the meeting of the Association for next year, to consider the desirability of assigning less prominence to the meetings of the departments and more prominence to the several sessions; also to consider the desirability of having a smaller number of department meetings.

Hon. Jas. T. Rollins, of Missouri, offered the following resolution, which was unanimously adopted:

*Resolved*, That this Association recognizes the valuable services rendered to the cause of National Education by General John Eaton, LL.D., Commissioner of Education, during the long term of his official duty. He has collected and distributed information of inestimable worth to schools and the nation. He has systematized the statistics of education and illiteracy, so as to make these dry facts living arguments in favor of

the instruction and elevation of the whole people. The country owes him a debt of gratitude, and we trust that his eminent ability and practical experience may still be continued in the further prosecution of the work which he has so auspiciously inaugurated.

The Association then adjourned to 8 P.M.

## Evening Session.

The Association met at 8 P.M., and was called to order by President Soldan. The minutes of the morning session were read by Secretary Sheldon amended by President Soldan, and then approved.

The Secretary read several announcements, after which Albert S. Bickmore, Superintendent of the American Museum of Natural History, New York City, gave a very interesting and instructive lecture on "Coral and Coral Islands," with strikingly beautiful illustrations.

The Association adjourned immediately after the lecture.

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# FOURTH DAY'S PROCEEDINGS.

### FRIDAY MORNING.

The Association was called to order by the President at 9.15 A.M., and opened with prayer by William N. Barringer, of New Jersey.

The minutes of the evening session were read and approved.

REPORT ON THE HIGHER EDUCATION OF WOMEN.—A special report of a committee on the Higher Education of Women was read by the Secretary of the Association. On motion, this report was adopted :

It is far from our desire and purpose to thrust upon this honorable body the consideration of irrelevant topics, and however ardent our interest in any reform may be, our sense of propriety, *i. e.*, *fitness* of *time*, *place* and *occasion*, shall not be consumed by our zeal. Therefore we shall limit this discussion of "Woman's Higher Education" to a few brief reflections upon the manner and the degree to which the interests of the public schools, in whose work this body is convened, might be affected by the admission of women to *all* of the privileges and opportunities of the universities.

If official records, reports of popular discussions, and such partial histories of education in the United States as have yet been prepared may be believed, even a quarter of a century ago women were, as a rule, employed only in primary schools, and were but rarely intrusted with higher work. A two-fold theory had thus restricted women teachers: First, It was sincerely believed that women were physically unable to discipline and control any but small children; Second, It was as sincerely thought that women were intellectually incapable of teaching advanced pupils. It is well known that the exigencies of war installed women in the "winter schools" of country dis-

tricts and in the "Grammar" and "High" schools of towns. In very recent years the tendency has been toward giving the *instruction* in part of even Grammar and High School work almost entirely into the hands of women, while the supervision, the management, and what may be termed the office work of the schools, have been carried on by men. This somewhat singular division of labor, almost reversing former theories concerning the relative executive capacities of the sexes, can only be stated here, although its philosophical consideration might worthily occupy students of Pedagogics and professional educators.

A monopoly of the instruction of our youth by women may be hardly less disastrous than a monopoly of their discipline by men; and if the present tendency be not, like its former opposite, fortuitously checked, future conventions may consider such questions as, "How shall masculine influence be increased in our public schools?" or, "How shall the just balance of masculine and feminine influence be maintained in our public schools?"

However, our immediate problem is: How can the preponderating feminine influence already in our public schools be made to best subserve the highest interests of our people? It is probable that the teachers themselves, their supervisors and their patrons, would agree in the statement that one of the greatest needs in our Grammar and High Schools is a higher order of scholarship in the teachers in these institutions. In these schools college-bred women are very rare. The very secondary scholarship of the majority of teachers holding these positions is generally disregarded, but the moment one considers it at all, the reasons for it are obvious enough; they are, moreover, reasons which reflect no discredit upon the teachers themselves, and which can happily be counteracted by a concerted effort on the part of teachers and public.

First, the best colleges for women, Vassar, Wellesley, and Smith, are of very recent origin, and the best coeducational institutions like *Cornell* and *Michigan Universities* have been co-educational but a few years. Second, until within a very recent period, owing to public opinion, a majority of the women who became teachers, did so from pecuniary necessity; such, of course, were not able usually to pursue a college course before going to work; and if they had at some previous time been able, the same public opinion, which had then kept them out of professional or other labor, had likewise then kept them out of college. These suggestions are interjected that it may be clear that this criticism of their inadequate scholarship is by no means intended as a reproach to the teachers themselves. The fact of inadequate scholarship being granted, it is next in order to inquire into its results; there are so many that an exhaustive enumeration will not be attempted, and only a few will be named which seem to bear most obviously upon the immediate object in view. It has been lately remarked, by eminent educators of wide experience and of unprejudiced observation, that there seems to be among our youth a growing indifference instead of a growing enthusiasm toward the higher learning; it is noticed with anxiety that our High Schools are not the most reliable feeders for our colleges and universities; and while no concerted effort has been made to collate statistics which would show the exact per cent. of High School graduates who enter college and which would further indicate the ratio of this number to the per cent. who formerly entered college; still it is believed that the relative number of young people who aspire to college culture, *i. e.*, the number considered in relation to the population, and also in relation to the number and quality of colleges, is waning. Further, it is believed that this indifference is greater among young men graduating from our High Schools than among young women. Youths passing from our High Schools skip the college and enter straightway upon the practice of their craft or business, or if they have chosen a profession they

enter the professional school without delay. The exactions of modern life, its madding competition and premature ambitions furnish forth numerous reasons for this haste on the part of our youth to plunge into the occupations proper to maturity: but we must believe that one potent reason for it exists in the fact that their teachers in childhood and youth have not the attainments calculated to stimulate in their pupils an ambition for the higher culture. The fever thirst for knowledge is contagious; the teacher who has it will be a center of the divine infection in her school; but some knowledge, indeed no mean degree of knowledge must be possessed by the teacher who would be such a center.

Now, if it be true that college-bred women are few even in our city High Schools, and still fewer in the High Schools of villages and country towns, it is yet more true that they are few indeed in city Grammar and in country district schools, those institutions in which the education of the vast majority of our people ends. That the formal education of the vast majority of our people does end in these schools is a fact which renders the culture of the teachers with whom they there come in contact, the knowledge, the aspiration, the refinement, and the moral tone of those teachers matter of almost infinite public moment. That this district school education is all that the majority will ever have access to makes it imperative that this shall be of the best quality, and that it shall be charged with vitality, and we all know that that quality in instruction which may be termed vitality is almost certainly in direct ratio with the instructor's own knowledge, with his own enthusiasm for knowledge, and with the breadth of her own intellectual outlook.

A large majority of our women teachers have only what is called a "common school education." A minority have in addition to this Normal School training. A minority of this minority have a High School or an Academic education, supplemented by a course in some Normal School, while, as above asserted, a very few (relatively, in comparison with all the teachers in the land) are college bred, and of these few a fractional per cent. only have enjoyed any professional training for their work. More and more all the time do young women who intend to teach in the public schools, prepare for it by attending some Normal School.

The Normal Schools of our country at present suffer under the same disadvantages which cripple other professional schools, as those of Law and Medicine, viz.: they do not, probably cannot yet, demand preliminary qualifications in the candidates for admission to them, of any high order; hence, much of the time and strength of Normal School faculties is spent in elementary tuition; and the fact that one is a graduate of a Normal, even of a State Normal School is no guaranty whatever that one is liberally educated (indeed this fact in no way implies or suggests a *liberal* education); nor can it be such a guaranty until at least a prior thorough academic education can be the condition of entrance into a Normal School. At this point we must not be misunderstood. It is not our intention to decry the Normal School or to belittle its function; no one appreciates more heartily what it has done, no one has a more exalted opinion of its ultimate mission, but at present most of our college-bred teachers are not Normal graduates, and most of our Normal graduates have, as compared with liberally educated people, a very limited culture; in short the one class lacks skill and the other lacks learning, and in a profession where skill and learning should exist together, and both in no mean degree, they are too frequently found only in low degrees or separate. That women, owing to their natural tact and to the degree to which this has been augmented by Normal training, have very considerable skill cannot be denied; that generally their skill in imparting knowledge is greater than their knowledge is equally true. That at present there is relatively a greater desire for knowledge,

for culture, and more intellectual aspiration among the women teachers of this country than among any other class of our people is patent to the most indifferent observer. The causes which have recently co-acted to produce this condition of mind are very interesting but cannot here be discussed. With this condition of mind exists another fact. Many young women who have been teaching a few years, now have the means (which before entering the profession they lacked) to carry forward their own education. The Normal School with its ability to increase their skill is less adapted to their needs than the College. The College is less able to help them than the University. Why the College is less able or in what respects it is less able is the next point to consider. While most of the young women with these ambitious aims already have, so far as mere book knowledge is concerned, only academic acquirements, and would therefore seem to find their mates in collegiate undergraduates, they average in age several years more than undergraduates.

This higher age and their experience must inevitably give them a maturity of mind which will be a great advantage over the average undergraduate, and make class association with the latter relatively unprofitable. Moreover, it often happens that their experience has already led them to a knowledge of their special tastes and abilities, and that an advanced course in some special department of study would be vastly more valuable to them than any regular undergraduate course.

MAY WRIGHT SEWALL,
WILLIAM T. HARRIS,
WILLIAM E. SHELDON,
*Committee.*

On motion of Dr. Bicknell, Le Roy D. Brown, of Ohio, was elected Assistant Secretary.

Mr. George L. Fox, of New Haven, being absent, his paper on "Training for Citizenship" was, at the suggestion of Joseph R. French, referred to the Executive Committee, with power to print if it was decided advisable.

Mr. C. W. Bardeen, of Syracuse, N. Y., being introduced, read a paper on "The Teacher's Business."

On motion of Mr. Aaron Gove, of Colorado, the discussion of Mr. Bardeen's paper was postponed.

Mr. Thomas Hampson, of Washington, D. C., being introduced, read a paper on "The Apprenticeship Question and Industrial Schools in the United States."

On motion, the discussion of Mr. Hampson's paper was postponed, and a recess of three minutes was taken.

A communication from the President of the National Music Teachers' Association was received, read by title, and placed on file.

The Secretary read a notice given by the Delaware and Hudson Canal Company's Railway, relative to an excursion to Lake George and Ausable Chasm.

Superintendent Aaron Gove read a communication from Governor Eaton, of Colorado, inviting the Association to hold its next annual meeting at Denver.

REPORT OF COMMITTEE ON NECROLOGY.—A report of the Committee on Necrology was read by William E. Sheldon, Chairman. The report of the Committee was unanimously adopted by a standing vote of the Association.

The Committee on Necrology beg leave to submit their report for the past year, and in the discharge of this duty it is gratifying to be able to state that, considering the large membership of the Association, death has dealt very kindly with us in having removed but a small number of those who have been earnest and conspicuous workers in the great field of educational effort. The Committee regret that in some cases they have not yet been able to obtain that definite and exact information of details in the lives of our brethren who have thus been called to their reward.

First, and most venerable on the roll of the departed, we record the name of PHINEAS ALLEN, of West Newton, Mass., who was present at the meeting held in Boston, in the year 1872. Mr. Allen died in May, of the present year, and he is believed to have been the oldest actual teacher in the United States, having taught constantly for more than sixty-five years; during the ordinary school terms, and on Friday, preceding the Monday of his death, he conducted a recitation in the Spanish language. He was the master of seven different languages, a ripe, general scholar, a modest man, and a faithful citizen. The Committee hope to obtain more detailed and definite particulars of the remarkable professional career of this patriarch in our profession for publication in the future.

We have next briefly to record the name of C. W. SMITH, Superintendent of Schools in Hennepin County, Minnesota. The career of this gentleman was one marked by great vicissitudes. For many years he was a traveler to the remotest parts of the earth. He went on a trading voyage to the natives of Patagonia. He was afterwards paymaster on the first railway built in the Argentine Republic. He went to Minnesota, and soon entered upon the duties of Superintendent of one of the most populous and wealthy counties in the State, the schools of which he raised to the highest state of efficiency. He introduced into these schools a carefully graded course of study, united the teachers in the most enlightened measures of co-operation, and aroused a degree of interest among the people almost unprecedented in a rural population. His death was instantaneous, and was caused by embolism of the lungs, while riding in a public conveyance of the city of St. Paul.

His loss is mourned by the entire body of teachers and his fellow-citizens, who united in the most touching public expressions of respect for his character, and of grief at his untimely and sudden death. Of this gentleman and his professional labors, the Committee can promise more definite and instructive particulars in the future.

Hon. Gustavus J. Orr, of Georgia, a member of the Committee, communicates the name of COL. MARK JOHNSTON, of Atlanta, Ga., who became a member of the Association at the meeting held in that city.

WILLIAM HARVEY WELLS, A.M., died January 21, 1885. Mr. Wells was born in 1812, in Tolland, Connecticut, and received his elementary education in the best schools and academies of New England. He was a natural born teacher, and his early manhood was spent in his chosen profession. In 1848 he became the first principal of the famous Putnam Free School, at Newburyport, Mass. Mr. Wells inaugurated and shaped the plans of this school, which opened with forty pupils of each sex, selected by competitive examination from three times that number of applicants from the best

preparatory schools of Newburyport and vicinity, including many from Boston and other cities. One of the pupils * of that first class, herself now a distinguished teacher in Massachusetts, says:

"It was a field for organizing and creative energy of a high order, and was filled with distinguished ability by Mr. Wells, who loved to speak of that first class as one of shining talents; it was a darling of his early enthusiasm, and thoroughly magnetized by his zeal; into the life of its every member he projected his high ideals and fervent aims, and they have endured through a generation of grateful remembrance. He aroused the most effectual *esprit de corps*, and I venture to affirm that the mutual ardor which he inspired in the cause of learning and character have so survived, that at this day a genuine feeling of fellowship binds the hearts of those members as with links of steel."

She further says: "As a tribute to his power as a teacher, that a large proportion of that class confirmed his generous confidence, and their names as authors, teachers, and scientists, shine as gems in his crown. I believe this success was largely owing to the inspiration of that confidence, and to the moral and intellectual stimulus of his example and training. In every direction in which his mind reached out he communicated magnetic fervor. He made his scholars feel life to be a cheery *business;* there was no room in his theory for drift and dalliance, but with precise and systematic habits and methods of work he taught us to achieve success. He was always true, always in earnest, always meant character. His prayers, his short and earnest exhortations, his private conferences, his personal appeals, were most searching and effectual. He taught his pupils how to live, so as that they might say at last, 'Thou, Lord, gavest me ten talents; behold, I have made them ten more.' Yes, he inculcated without offense, in all his relations with his scholars, the precepts of the Christian religion, now so out of date in our school education. He was a master-builder of character. Aside from this great accomplishment, which was supreme, he was a most clear and vigorous intellectual instructor. Grammar was a pastime, and the clouds never gathered about it in his hands. Composition was an exciting romance."

Prior to his going to Newburyport he was Principal of the English Department in Phillips Academy, Andover, Mass., where he did much to give that institution the great fame it has for many years enjoyed. From Newburyport he went to Westfield, Mass., where he was for many years the principal of one of the Massachusetts State Normal Schools. While in the active work of teaching he was an earnest promoter of the Massachusetts Teachers' Association, which was organized in 1845, of which he was chosen a councilor at the first meeting, which was held in Worcester, and took a prominent part in the proceedings, submitting a series of resolutions on school discipline, of a strong and wholesome character, which were unanimously adopted. Very few of the noble band of educators of that day live to weep at the grave of Mr. Wells.

Of that notable body were Thomas Sherwin, S. S. Greene, Gideon F. Thayer, Barnas Sears, Louis Agassiz, Cyrus Pierce, J. P. Cowles, Oliver Carlton, Benjamin Greenleaf, and many others who have closed their labors on earth. Charles Northend, Elbridge Smith, George A. Walton, Joshua Bates, Ariel Parish, B. F. Tweed, John D. Philbrick, and a few others of that group of educational pioneers, still living to cherish the memory of their friend and co-laborer, Mr. Wells.

In 1850, at the sixth annual meeting of the Massachusetts State Teachers' Association, Mr. Wells gave a lecture on "The Importance of Inculcating Self-reliance on the Part of the Pupil," an address of marked excellence. Mr. Wells was chosen one

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* Mrs. Louisa Parsons Hopkins.

of the editors of the *Massachusetts Teacher* early in its history. In 1851 he was elected President of the Massachusetts Teachers' Association, and served for two years. In 1856 he resigned his position at Westfield, and became superintendent of the schools of Chicago, which important office he held until 1864. He was chosen President of the National Teachers' Association in 1863, at the great meeting of this body in Chicago, and presided at the meeting held in Ogdensburgh, N. Y., in 1884. Since he resigned his position in Chicago as superintendent of schools, he has been a resident of that city, engaged in business, but has been a member of the Board of Education, and taken an active interest in the cause of education. He was an industrious writer on educational subjects, contributing to various educational journals to the close of his life, and was the author of the graded course of instruction now quite generally in use. His publications are a *Grammar of the English Language,* published in 1846, and revised in 1858, of which more than 250,000 copies had been sold in 1862; an *Elementary English Grammar* in 1848; and the *Graded Course of Instruction for Public Schools,* in 1862. During the last years of his life he was largely occupied with a new edition of his grammar, which he was preparing for the press.

Such was the integrity and energy of Mr. Wells's character that positions of trust and honor were continually crowding upon him, and there are few public, educational, or charitable institutions in Chicago which have not, at some time or other, numbered him among their directors. Mr. Wells leaves a widow and five children, to whom he bequeaths the legacy of a well-spent life, and the priceless inheritance of a noble Christian example.

"'Tis held that sorrow makes us wise
Whatever *wisdom* sleep with thee."

Charles Oliver Thompson, A.M., Ph.D., died March 17, 1885.—Dr. Thompson, the son of Rev. Dr. Wm. Thompson, of Hartford, was born September 25, 1836, at Windsor, Conn., where he fitted for college in the academy under the late President Paul A. Chadbourne. He entered Dartmouth College in 1854, and graduated with honor, especially in chemistry and physical science. He received the degree of A.M. in 1861, and the degree of Ph.D. in 1870, from both Dartmouth and Amherst Colleges.

While in the Academy he taught several district schools in Connecticut, and during the long college vacations he was employed in the higher schools of Massachusetts. After his graduation, in September, 1858, he entered upon the duties of Principal of the Peacham Academy, in Vermont, where he remained six years, with brief intervals, when he was engaged in practical surveying and civil engineering. In 1864 he organized the Arlington, Massachusetts, High School, from the old Cotting Academy, where he united thorough preparation for college with the advanced English and scientific studies.

From this school he was elected to the Presidency of the Free Institute of Industrial Science in Worcester, Massachusetts; and after eight months' study of the technical schools of Europe, he entered upon his duties February, 1868. Technical schools in this country were then in their infancy. The organization of the Technical School at Worcester, and his fifteen years of original work there, which placed the school in the front ranks of practical scientific schools, constitute the best part of Dr. Thompson's life work. After nearly a year's additional study in Europe, February, 1883, he took charge of the Rose Polytechnic School at Terre Haute, Indiana; and in the short space of two years he was able, through his wide experience and his organizing power, to start that young institution at once on a career of superior scholarship and wide influence—in two years the work of decades!

It is not easy, in a brief space, to make an adequate estimate of the work and character of such a man as Dr. Thompson ; and it is hardly necessary, for such an influence as his was felt by all who came in contact with him, and by them it will be perpetuated in better deeds rather than in words. His early training in the district schools made him acquainted with the first steps in education, in social science, and in the study of nature and men, in the concrete. His experience as a civil engineer taught him the practical side of scientific study. To these he joined a thorough classical and literary training, and by these means he was able to establish the classical and the higher English studies in their proper relations and due proportions in the Arlington High School, at a period when the two courses of study in such schools were in danger of assuming antagonistic positions. His whole effort went to show that the true attitude of these studies is that of mutual helpfulness and friendly rivalry.

With this experience corrected and enforced by foreign travel and study, he came to the work of organizing the Technical School at Worcester. The same question naturally was present, and it was met in the same spirit. The technical school, in his view, was not an antagonist to the college, but a helper in a different field. In this work he had the cordial sympathy and support of a board of trustees, as he thought, the best that could be. To a thorough course of scientific study in that school, based upon actual experiment, and combined with the necessary amount of literary culture, he added practical work in the shop to reinforce and supplement the other. This feature of the school was unique in this country, and its success is unsurpassed.

As an executive officer he was prompt and decided. He was intolerant of insubordination, but always helpful and inspiring to his students ; and with them impatience of wholesome restraint ripened in later years into profound respect for the strong arm which had guided them to earnest work and to remunerative usefulness.

There is no school whose graduates have shown a larger per cent. of successful men in their chosen vocations ; and in no school have the statistics of the occupation of its sons been collected with more care, or been better used as an incentive to undergraduates.

He was a public-spirited citizen as well as a teacher. In art, in music, in antiquarian research, in the public library association, in all social questions, he appeared as an earnest and intelligent worker to elevate the public. As a member of the school board of Worcester, he proposed and inaugurated some of the most beneficial innovations, notably the introduction of drawing as one of the common school studies ; he was active in securing legislation for this object in the Massachusetts Legislature in 1874. But while exerting an efficient influence in the wide field of general education and culture, he made himself at home in the various county, State, and national associations of teachers, and in the philological and other associations for the advancement of science, whose meetings he always attended when it was possible, and he never spoke to a listless audience. Though a teacher all his life, he never fell into the ruts to which the profession so naturally tends. The great versatility of his work and of his talents appears in the wide range of subjects treated in his published essays, all masterly in their several lines; and no one has done more than he to elevate and ennoble the teacher's calling.

As a man, Dr. Thompson was active and intensely awake ; he was a genial companion, and in his friendships warm and true. He was quick to see, and ready and prompt to respond. He valued highly the work in which he was engaged ; but he never disparaged that of another man ; he respected his honest opponents, and though quick to see through a fallacy or a sham, and witty, even sarcastic, in exposing it, his most intimate friends cannot recall an instance when he made a jest to wound the feelings of any one. His talents and his acquirements were great in many directions ;

he was well-rounded in culture and in character—in short, "he was a man, take him for all in all, we shall not look upon his like again."

He has gone; but his influence lives in the lives of his many pupils and in the improved character of every one of his friends; and if lives are long in noble deeds rather than in years, his was complete. Though much remains which no one can do so well as he, yet in his accomplished work he left a monument of which any man might be proud; and as we, who shall meet him here no more, remember that presence which was always a glad inspiration, we behold, as in a new radiance, the glory of such a life.*

"And it may be that all which lends
The soul an upward impulse here,
With a diviner beauty blends,
And greets us from his holier sphere."

SUPERINTENDENT C. W. SMITH.—"Died suddenly in St. Paul, June 12, 1885, Mr. Charles W. Smith, who was county superintendent of schools of Hennepin County, Minn., and a prominent member of the Independent Order of Odd Fellows."

This brief paragraph announces the close of a useful life. Mr. Smith was one of the most prominent of our educators. He will be missed at our public gatherings, where his earnest words were often heard, but his death will be most deeply felt in Hennepin County, where stands the "white bust of his fame." The "graded country schools" of that county are the best and most enduring monument to his memory.

HISTORY OF HIS LIFE.—He was thirty-seven years of age, and his life was an unusually checkered one. He had traveled in nearly every quarter of the globe, thus storing up a vast fund of information and acquiring a broad range of vision. From Greenville, Ill., his native place, he moved with his parents to Philadelphia, and attended school until 1862. He then went to Europe and spent three years in the Liverpool Free College, graduating in 1865. He afterwards traveled through Europe. In the following year he went to Calcutta, returning to this country in 1867. He next went to South America; was part owner in the ship *Kossuth*, and was paymaster of the first railroad built in the Argentine Confederation, in 1868. He afterwards took charge of a steamer for the relief of a Welsh colony in Patagonia, and returned overland to Buenos Ayres. He returned to this country in 1870, and located in Minnesota. Here he devoted himself to teaching. He came to Minneapolis in 1873, and two years later was elected superintendent of the Hennepin County schools, which position he occupied at the time of his death, being re-elected at the expiration of each term with practically no opposition. He married Electa Hawkins in 1872. He has been quite prominent in Odd Fellowship, holding numerous offices of high honors. He is credited with having done excellent service to the cause of education in his position of county superintendent, being highly respected by all the teachers who have come within his jurisdiction. The schools of the county, moreover, bear witness to the efficiency of his work. As a man and citizen he has commanded the wide respect of friends, who will hear with no little sadness, as well as surprise, of his untimely demise.

The following tribute to his memory from one of his teachers, Sara M. A. Cowles, was read at the memorial services in Minneapolis:

"Not dead! It cannot be, our leader true
Who sought so earnestly to teach the way,
That we might pillars be of strength to those
Whose feet are walking in life's dawning day.

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* The committee are under obligations to A. P. Marble, Esq., superintendent of schools of Worcester, Mass., for the sketch of the life and labors of Dr. Thompson.

"Not dead! We who his kindly counsel heard,
And inspiration gained for daily need,
Cannot believe his praise no more we'll win,
Whose sympathy we deemed our richest meed.

"The flower-strewn casket, and sad music's dirge,
Speak of a soldier, and the victory gained.
'Died at his post,' no other eulogy
Is needed, when the goal is thus attained.

"And he who trod the Andes' rugged height,
The sunny vales of France and Albin's classic halls,
Now sleeps in Lakewood, where the rippling waves
Awake him not to duty's earnest calls.

"His work for others was a lesson grand,
That we should seek amid life's toil and strife,
To ever serve the good, the pure and true,
And this has ope'd through death the gates of life."

HENRY B. NORTON, councilor of the Association from California died suddenly, June 22d, from congestion of the brain, at his home in the Santa Cruz mountains, near San Jose, California. According to directions found in his will, his body was laid there to rest, on his own beautiful ranch overlooking the waters of the broad Pacific.

A lovely and beautiful character has been taken from us. A beloved and trusted friend and helper in all good work will not meet with us again.

At Madison, last summer, he spoke to his intimate friends of his home and surroundings, of his charming family consisting of wife and five children and expressed himself as being more happily situated, more perfectly contented than he had ever hoped or deserved to be. He told us that he meant to live the remainder of his days on his beautiful ranch and to die and be buried there. How soon have his desires been accomplished! Professor Norton was a graduate of the Illinois State Normal School, in its early days, Class of 1861. After a varying life of several years of editorial and educational work he became Principal of the Kansas State Normal School. He left Kansas in 1875 to enter the service of the California Normal School at San Jose, where he remained until his death. Intellectually he was an acknowledged strength. As a Christain minister, popular lecturer, and most of all a beloved teacher, his memory will be as lastingly beautiful as the beautiful land of his adopted home.

Respectfully submitted,

W. E. SHELDON,
WM. F. PHELPS,
For the Committee.

On motion of Commissioner Eaton of Washington, D. C., the committee on Necrology for 1884–5 was continued for the ensuing year, the committee to consist of William E. Sheldon of Massachusetts, W. F. Phelps of Minnesota, A. J. Rickoff of New York, George A. Magoun of Iowa and Gustavus J. Orr of Georgia.

Mr. Speer of Kansas extended an invitation from the President of the Board of Education of the city of Topeka, from Governor Martin, and all the State officers of Kansas, from the Kansas State University, the Kansas Teachers' Association, and also from the Missouri and Nebraska State

Teachers' Associations, inviting the Association to hold its next meeting at Topeka, Kansas. Referred to the Board of Directors.

Dr. Thomas W. Bicknell, Chairman of the Committee on Resolutions, submitted the following resolutions which were taken up *seriatim.*

RESOLUTIONS.

Kindergarten :

In view of the recognized value of Kindergarten education in training the sensibilities and the will and in developing self-activity, it is

*Resolved,* That we trust the time is near at hand when the true principles of the kindergarten will guide all elementary training, and when public sentiment and legislative enactment will incorporate the kindergarten into our public school system. Adopted.

Higher education of women :

*Resolved,* That we heartily give the support of our encouragement and sympathy to the higher institutions of learning that open their doors widely to women and that we see in this action the promise of such attainment as will fit women and especially women teachers for places of the highest honor and usefulness. Adopted.

Tenure of office :

*Resolved,* That the growing importance of the teacher's tenure should secure for that subject a higher place on the list of topics known as "civil service reform." While it is generally admitted that the tenure is intimately related to many important phases of education, and that reform is urgently called for, there is still need of a much fuller discussion of the subject in its practical bearings. The tenure should be practically co-extensive with the period of successful service, neither stopping short of nor passing beyond this limit ; but the question is, how shall we secure that end? Such are the importance and difficulties of the subject, that we recommend the appointment of a committee of five to report on it next year. Adopted.

Supervision of Schools:

*Resolved,* That we commit this Association unreservedly to both local and general supervision of public schools; while in some States fully differentiated systems of supervision have appeared, embracing city, county or district, and State superintendence in others, one or more of these necessary parts of a complete system are lacking, and in still others only a faint outline is discernible. In some States, county or district supervision is the great need of the hour. In many parts of the country, uniform courses of study for district schools, and the grading of the pupils in them, is attracting much attention, and we recommend the subject to the friends of public education everywhere as of the first importance. Adopted.

Approving Council work :

*Resolved,* That we express our high appreciation of the work accomplished by the National Council of Education and we believe that its general methods of work are sound and, if thoroughly pursued, promise valuable results. Adopted.

The use of tools :

*Resolved,* That we recognize the educational value of training the hand to skill in

the use of tools and recommend that provision be made as far as practicable for such training in public schools. Laid on the table.

### Drawing and music :

*Resolved,* That the public interest requires that instruction in drawing and music should form an integral part in the education of the people. Adopted.

### National Educational Museum :

*Resolved,* That we commend the efforts of the Commissioner of Education to retain, in connection with the Bureau of Education, the best illustrations of the conditions and appliances of education exhibited by foreign countries at New Orleans. We believe a museum of the best illustrations of this character in the control of the Bureau where educators may study them whenever they may obtain specimens by loan or exchange, will be specially promotive of improvements in all our schools. Adopted.

### National aid to education :

In view of the fact that among more than 50,000,000 of people, now inhabiting the United States, according to the census of 1880, there are 6,229,958 of these over 10 years of age, making 12.14 per cent., or nearly one-eighth of the entire population who cannot write, thus showing that in 18 States, including two territories, more than 13 per cent. and in 11 States more than 25 per cent. cannot write; and earnestly believing that the happiness of the people, and the perpetuity of the free government under which we live, is dependent upon the better education and virtue of all its inhabitants, and desiring in every honorable way to secure these advantages to the people of all the states ; it is hereby

*Resolved,* By the National Educational Association, now in convention assembled at Saratoga Springs, New York, that the Congress of the United States be earnestly recommended to extend such liberal pecuniary aid to the people of all the States and territories, for the purpose of aiding them, so far as the financial condition of the federal government will justify, to the end that every child in the country of school age may receive a good common school education under the respective systems of the several States.

*Resolved,* That a committee of seven members of this Association be appointed by the President to press upon Congress at its next session the great importance of this measure, and to render to the Committee on Education and Labor of the two Houses such aid and information as will be in their power to communicate to help forward the work proposed.

*Resolved,* That the Secretary of this Association be and he is hereby directed to cause to be prepared copies of these resolutions, signed by the President and countersigned by the Secretary of this Association and transmitted to the President of the Senate and to the Speaker of the House of Representatives upon the assembling of the next Congress of the United States. Adopted.

### Indian Education :

*Resolved,* That we heartily commend the efforts made to solve the so-called Indian problem by educating the young Indians out of the savagery of their parents into the industries and attainments of civilization, in which families shall be set apart by themselves in well-ordered houses with individual possession of land and other property,

and enter as proposed upon the duties and accept the obligations of citizenship. Adopted.

Education in Alaska:

*Resolved*, That this Association rejoices to know that Congress has provided for schooling the children in Alaska; and that Sheldon Jackson has been designated as agent to organize these schools. We know of no one so well qualified as he is for this distant and difficult task, and we send him our heartiest greetings. Adopted.

Reading Circles:

*Resolved*, That the organization of reading circles for promoting the literary and professional culture of teachers is a movement worthy of universal extension. Adopted.

PERNICIOUS LITERATURE.

In view of the evil influences upon our children and youth, growing out of the wide circulation of pernicious papers, pamphlets, and books devoted mainly to the illustration and description of vice and crime, which corrupt the morals and manners of our young people,

*Resolved*, That we, the members of the National Educational Association, strongly condemn the publication and distribution of such demoralizing literature, as inculcating false principles, establishing ruinous habits, and destroying a healthy, physical, moral and spiritual life. We urge upon all teachers to exercise as far as possible a watchful guardianship over the reading of their pupils, and to cultivate their tastes for good literature through the supplementary school reading, properly selected school libraries, and the use of the best books in public and other libraries of our towns and cities. We also urge upon State Legislatures the enactment of such laws as will prohibit the publication of evil and corrupting literature of all descriptions. Adopted.

Temperance:

Recognizing the value of all earnest and well-directed work for the formation and reformation of character, and realizing as part of this great work the importance of early training in habits of temperance and self-government, it is

*Resolved*, That we approve the effort to create a strong public sentiment in favor of temperance, and that we heartily endorse all proper individual and legislative action looking toward the healthfulness, happiness, and purity of the people.

*Resolved*, That in view of the immorality and crime occasioned by the wide circulation of the police and other papers devoted to the records of vice and crime, or filled with seductive illustrations, this Association recommends the passage of a law in all our States, such as has been passed in Texas and Georgia, and several other States, prohibiting the sale of such papers.

*Resolved*, That the Association, regretting the inability of Senator Henry W. Blair to present his expected paper on "Federal Aid in Education," and expressing its hearty sympathy with the principles of the movement with which Senator Blair's name is so intimately identified, accepts with pleasure the offered copies of his admirable speech in the Senate, which has already been the means of awakening so much intelligent interest in our national struggle with illiteracy. Adopted.

HONORS TO GENERAL GRANT.

General U. S. Grant, the foremost citizen of the United States, the great military captain of the age, and the constant and earnest friend of education, lies dangerously ill in our neighborhood on Mt. McGregor, awaiting with calmness, courage and resignation the issues of life or death. We, the members of the National Educational Association, representing the great body of American teachers, extend to General Grant our tenderest sympathies in his severe affliction, and express our admiration of his sublime fortitude, our wishes for his recovery, and our earnest prayer for Divine aid in the hour of his sorest needs. Adopted by rising, and the President and Secretary were instructed to telegraph the above to General Grant at Mt. McGregor.

The following letter was sent to General Grant:

"SARATOGA SPRINGS, N. Y., *July* 17, 1885.

"TO GENERAL U. S. GRANT, U. S. A.

"*Dear Sir*:—We have the honor to transmit to you by telegram and also by mail, a copy of the resolution hereto appended, unanimously adopted by the National Educational Association now in session at this place.

"In discharging this duty we beg also at the same time to tender to you our most sincere and cordial sympathy.

"We are with high respect,

"Your obedient servants,

"F. LOUIS SOLDAN, *President.*

"W. E. SHELDON, *Secretary.*"

The resolutions were discussed by Dr. E. E. White of Ohio, President James H. Smart of Indiana, Mr. H. L. Moore of Minneapolis, Supt. W. N. Hailmann of Indiana, Dr. H. T. Fuller of Massachusetts, Professor E. H. Cook of New York, Hon. James S. Rollins of Missouri, Supt. Jno. B. Peaslee of Ohio, W. I. Lewis of Tennessee, Zalmon Richards of Washington, Dr. J. A. Lippincott of Kansas, Dr. Henry Randall Waite of Massachusetts, H. R. Traver, Esq., of Louisiana, and Dr. N. S. Fellows of Iowa.

The minutes of the last evening's session and the minutes of the morning session of July 17th, were read and approved.

## Evening Session.

The Association was called to order at 8 P.M. by President Soldan.

Secretary Sheldon read the following communication from the President of the Music Teachers' National Association. It was ordered printed with the proceedings.

"*To the President and Members of the 'National Educational Association:'*

"Your Association, interested as it is in all that pertains to educational matters, can but be interested in every endeavor made in the direction of a broader conception of a teacher's duties, as well as in every effort on the part of any profession to contribute its share to the development of our educational resources. In bringing to your attention the work contemplated by the 'Music Teachers' National Association,' may

I emphasize the fact that in the ranks of the musical profession a great and genuine interest in the musical work of our public schools is being developed, and the apathy and coldness evinced by the majority of our leading musicians toward this work in its every phase is being supplanted, if not in every case by cordial recognition of the work done, at least by conceding its supreme importance.

"Granting that music is worthy of serious attention (a fact we believe universally acknowledged), and it necessarily follows that the first training in the art—which must exert a wonderful influence upon future attainment—should be of so substantial a nature, and founded upon such correct principles as to ensure future excellence.

"The child's first acquaintance with music, as something beyond a mere pastime, is generally made in the public schools, and that so much of this preliminary work has been of a nature illy calculated to secure accurate knowledge of fundamental musical principles, or foster correct musical taste, has been on the one hand the fault of unsympathetic musicians, and on the other of extremely poor judgment supported by parsimonious ideas on the part of school authorities. The captious criticism of the musician has well-nigh ceased, and the worth of the work done by conscientious teachers in this department is being estimated at its true value, but in order to offset the evil results of mistaken *judgment*, as well as mistaken *economy* on the part of those having authority in these things, it will be necessary to recognize the intrinsic worth of music and the dignity of the professional musician. I mean the *true* musician. In all your efforts to secure good results in this field of your labor, I can assure you of the cordial support of the 'Music Teachers' National Association.' This association has always taken a great interest in this question, and this year purposes to issue a pamphlet containing a valuable essay by Hon. John Eaton (with which he honored us) and all other necessary information bearing on this subject, and send it to every school district in the United States as a practical way of enforcing it upon public attention.

"The committee having this matter in charge, Mr. Theo. Presser, H. E. Holt, L. W. Mason, Geo. F. Bristow, N. Coe Stewart, and Chas. A. Landon, are men who have the esteem and confidence of all educators, and having been largely instrumental in accomplishing the good results already attained, we feel that we may confidently look forward to their continued efforts with assurance of their complete success.

"That they are supported in this work by an association representing a profession which is by its own exertions striving to elevate its standards of professional work and worth—as evinced by the establishment of the College of Musicians—and which by its action in the past, as well as by its future plans, is entitled to the credit of being thoroughly in earnest in the work, is at once my excuse for extending to you our congratulations, and offering you our assistance, and a source of encouragement to all persons who recognize that faithful study and conscientious teaching, in any department of education, is of help in building up a national character based upon a broad and well-rounded national education.

"Very respectfully,

"ALBERT A. STANLEY,

"*President Music Teachers' National Association.*

"PROVIDENCE, R. I., *July* 16, 1885."

The following telegram was read :

"MT. MCGREGOR, N. Y., *July* 17, 1885.

"WM. E. SHELDON,

"*Secretary National Educational Association, Congress Hall, Saratoga Springs :*

"General Grant thanks the Association for their resolutions, and wishes their efforts in the cause of education the greatest success. F. D. GRANT."

In accordance with a previous resolution, the following Committee was chosen to urge upon the Congress of the United States the passage of a law granting National Aid to Education, F. Louis Soldan being made Chairman of the Committee by special vote : F. Louis Soldan, Mo. ; T. W. Bicknell, Mass. ; David Murray, N. Y. ; James S. Rollins, Mo. ; J. J. Burns, Ohio ; J. L. M. Curry, Va. ; Edwin Willetts, Mich. ; J. B. Merwin, Mo.

Dr. Thomas W. Bicknell, of Massachusetts, submitted the report of the Committee on Education at the World's Cotton Centennial Exposition at New Orleans, La., 1884–5. This report after discussion by Mr. Francis A. Chapin, of Kansas, Prof. E. H. Cook and Dr. J. H. Hoose, of New York, Mr. H. L. Moore, of Minnesota, and Zalmon Richards, of Washington, D. C., was referred to the Executive Committee with power to print.

Dr. Bicknell read the following supplementary report of the Committee on Resolutions which was adopted by a unanimous vote of the Association.

*Resolved,* The hearty thanks of the Association are due and tendered to the various individuals, societies and corporations in Saratoga Springs and abroad for valuable services rendered in connection with this twenty-fifth annual meeting ; first, to all railroad corporations granting reduced rates of fare to and from Saratoga, and all other concessions ; second, to all the proprietors and managers of hotels and boarding-houses for reduced rates; third, to the Board of Education of Saratoga Springs, and the officers of churches and public buildings for the use of their rooms for our meetings and all other favors extended ; fourth, to the writers of papers and the speakers who have contributed valuable educational thought by papers and discussions, and to Saratoga Springs for valuable reports ; fifth, to President Soldan and his associates of the executive board for their unusual efforts to make the meeting a success in numbers and influence; and lastly, to all others who by voice, pen, or other effort have contributed of their ability to make this gathering one of the most interesting and profitable in the history of the association.

The session closed with short addresses from representatives of the various sections of the United States. Principal C. C. Rounds spoke for New England ; Dr. J. H. Hoose for the Middle States ; Dr. E. E. White and President George T. Fairchild of Kansas, for the Western States ; Miss Clara Conway, Mr. J. M. Fendley, Mr. J. M. F. Irwin and Supt. S. M. Finger for the South.

President Soldan, after some brief remarks of an appropriate character, introduced the President elect, Dr. N. A. Calkins, of New York, who delivered a brief address, and then declared the twenty-fourth annual session of the National Educational Association adjourned.

# NATIONAL EDUCATIONAL ASSOCIATION, 1885.

## MINUTES OF THE BOARD OF DIRECTORS.

### FIRST MEETING.

BETHESDA PARISH HOUSE,
SARATOGA, *July* 14, 1885.

The Board of Directors met in accordance with the call at 5 o'clock P. M., at the rooms of the Bethesda Parish House, President Soldan in the Chair. The following members of the Board were present, Soldan, White, Calkins, Sheldon, Hagar, Jones, Gove, Rounds, Eaton, Bicknell, Fairchild, Fuchs, Canfield, Hall, Sickel and Stockwell.

The Secretary read the minutes of the last meeting of the Board at Madison, Wis. The President made a report of his work and that of the Executive Committee during the year, and gave the reasons for selecting Saratoga as the place of meeting for 1885.

The Treasurer presented his report for the year ending July 1, 1885. See page 33.

Messrs. Hagar of Massachusetts, Gove of Colorado, and Hewett of Illinois, were appointed an Auditing Committee to examine the accounts, the Treasurer's report, and the results at the next meeting of the Board.

Dr. Tappan, of the Board of Trustees of the Permanent Fund, made a report. It shows that the Association has $200 invested, and holds a note of $80, of Mr. Marshall of West Virginia, with accrued interest. His report was approved.

Dr. Bicknell, Chairman of the special Committee on Finance, appointed at Madison, made a report as follows, which was adopted :

#### REPORT.

*Committee on Investments of Moneys in hands of Treasurer of the National Educational Association as net proceeds of the Madison Meeting,* 1884.

At a meeting of the Board of Directors of the National Educational Association, held at Madison, July, 1884, the following persons were appointed a Committee to invest such funds as remained in the Treasury, as the net proceeds of the meeting at Madison, July, 1884. This Committee consisted of Messrs. Calkins, Sheldon, Hagar, Soldan and Bicknell, and they beg leave to report that after the payment of all the expenses of the annual meeting of 1884, and the publication of three thousand volumes of the proceedings, there remained in the Treasury the sum of $3005.28. Your Committee decided to make a permanent investment of $3000, thereby leaving a bal-

ance of $5.28 in the Treasury. After a careful examination of the various methods of investment, it was decided to purchase a mortgage note secured by a mortgage on real estate in the city of Providence, R. I., the value of the grounds and buildings being over double the amount paid therefor, and the interest thereon payable semi-annually at six per centum per annum. In order that the money thus invested may remain as a permanent investment, it is recommended by your Committee,

*First.* That the Association use annually only the interest accruing therefrom toward the payment of the publication of the proceedings of the annual meetings.

*Second.* That this Permanent Fund be placed in the charge of the Trustees of the Permanent Fund of the Association, who shall have the oversight and protection of the Fund, and the collection of the proceeds accruing therefrom, paying the same into the Treasury of the Association, as the semi-annual interest falls due and is paid.

*Third.* That a committe of three be appointed to secure articles of incorporation for the National Educational Association, under United States or State Laws, as speedily as may be. Respectfully submitted,

THOMAS W. BICKNELL, *Chairman*,
W. E. SHELDON,
N. A. CALKINS,
} *Committee.*

In accordance with its recommendations, Messrs. Calkins of New York, Bicknell of Massachusetts, and Tappan of Ohio, were appointed a Committee to secure at once an Act of Incorporation of the Association.

Dr. Bicknell presented the financial Report of the Treasurer of the Exposition of Madison (E. E. Smith), which was approved and ordered to be printed in the Volume of Proceedings for 1885.

"LAFAYETTE, IND., *March* 2, 1885.

"HON. THOMAS W. BICKNELL, *ex-President National Teachers' Association, Boston, Mass.*

"DEAR SIR:—Enclosed herewith I send you a copy of my report as Treasurer of the National Educational Exposition, as certified to by the Auditing Committee appointed by yourself. I desire it inserted with the other information concerning the Exposition in the forth-coming report of the meeting at Madison, Wis.

"A similar copy was handed to Dr. Smart, January 15, 1885.

"Please notify me of the receipt of this and oblige

"Yours very truly,

"E. E. SMITH,

"*Treasurer National Educational Exposition.*"

The Report is as follows:

# REPORT OF THE TREASURER

OF THE

# NATIONAL EDUCATIONAL EXPOSITION.

## Receipts.

*From Subscription.*

| 1884. | | |
|---|---|---|
| May 7. | By subscription Van Antwerp, Bragg & Co. | $100 00 |

*From Commercial Exhibitors.*

| | | |
|---|---|---|
| July 14. | Levy, Baker & Co., Indianapolis | 10 00 |
| July 14–17. | W. A. Mowry, sales of space in the Rotunda of the Capitol | 228 00 |
| " " | Union School Furniture Co., Chicago | 50 00 |
| " " | Ward & Howell, Rochester, N. Y. (carpenter work) | 25 00 |
| " " | L. D. McIntosh | 10 00 |
| " " | L. D. Allen | 5 00 |
| " " | R. E. Bean | 5 00 |
| " " | J. H. Read | 2 50 |
| " " | Sherwood & Co. | 5 00 |
| " " | E. Remington & Sons | 5 00 |
| " " | Jas. W. Queen & Co., Philadelphia | 50 00 |
| | Total from Com'l Ex. | $395 50 |

*Received from Non-commercial Exhibitors.*

(Expense of carpenter work, etc.)

| | | |
|---|---|---|
| July 14–17. | From J. T. Merrill, La Fayette, Ind. | $ 5 00 |
| " " | " Illinois Industrial Univ. (Dr. Peabody) | 10 00 |
| " " | " Iowa State Exhibit (H. Sabin) | 25 00 |
| " " | " Indiana State Exhibit (J. W. Holcombe) | 15 00 |
| " " | " Mass. Inst. for Feeble-minded Children | 5 00 |
| " " | " Wisconsin State Exhibit (W. E. Anderson) | 10 00 |
| " " | " St. Louis Manual Training School (Prof. Woodward) | 15 00 |
| " " | " Mass. Inst. of Technology (Prof. Ordway) | 10 00 |
| " " | " Minn. State Exhibit (B. M. Reynolds) | 5 00 |
| " " | " Kindergarten Exhibit (W. N. Hailmann) | 30 00 |
| " " | " Exhibit in Art Hall (Prof. Perry) | 45 00 |
| " " | " Illinois State Exhibit (Prof. Hull) | 8 00 |
| | Total from Non-com'l Ex. | $183 00 |

*Miscellaneous Receipts.*

| | | |
|---|---|---|
| " " | From directories of exhibit sold by boys | $ 1 57 |

*Summary.*

| | |
|---|---|
| From Subscription V.-A., B. & Co. | $100 00 |
| " Commercial Exhibitors | 395 50 |

| | | |
|---|---|---|
| | From Non-commercial Exhibitors | $183 00 |
| | " Miscellaneous Sources | 1 57 |
| | | $680 07 |
| July 19. | From N. A. Calkins, Treas. Nat. Teachers' Assoc., to cover a probable deficit | 183 00 |
| | *Total Receipts of Treasurer,* | $863 07 |

EXPENDITURES.

| | | |
|---|---|---|
| 1884. | | |
| Jan. | For stamps, telegrams and blank-books | $ 3 00 |
| Feb. | " " and envelopes | 5 25 |
| Mar. | " plat of Exposition Building | 3 00 |
| April | " stamps and envelopes | 2 40 |
| May | " expressage and telegrams | 6 47 |
| June | " circulars, wrappers, etc | 43 85 |
| June | Pd. for postage and telegrams | 6 00 |
| July 12. | Pd. to Jas. Robinson, laborer, 4 days | 6 00 |
| " " | " Dennis Hughes, " " | 6 00 |
| July 14. | " W. R. Rosenstengel, laborer, 2½ days | 2 50 |
| " " | " Merrill, messenger boy | 50 |
| " 15. | " boys for sweeping, or messengers, etc | 1 15 |
| " " | " W. D. Parker, telegrams | 55 |
| " " | " W. W. Pollard (for placards) | 18 00 |
| " " | " W. S. Perry (printing and postage) | 18 10 |
| " " | " W. W. Pollard (putting up placards) | 1 88 |
| " " | " W. W. Pollard (sign for W. D. Parker) | 4 00 |
| " " | " W. D. Parker (bills of "Democrat" and Cantwell) | 10 50 |
| " 16. | " Chas. Thomas, messenger boy | 50 |
| " 17. | " Jas. Bray (lumber and carpenter work) | 187 46 |
| " " | " M. T. Cantwell (printing) | 7 50 |
| " " | " Jas. H. Smart (postage, telegrams, etc.) | 7 02 |
| " " | " Jas. H. Smart, as per bills rendered for person'l expenses, etc. | 107 52 |
| " 18. | Am't returned W. S. Perry (Amer. Miss. Ass.) | 10 00 |
| " " | " " to other non-commercial exhibitors | 173 00 |
| " " | Pd. to E. E. Thomas, policeman | 4 00 |
| " " | " W. A. Mowry (postage, telegrams) | 6 50 |
| " " | " H. R. Sanford (circulars, etc.) | 4 00 |
| " " | " W. E. Sheldon (expressage, etc.) | 10 25 |
| " " | " office expenses | 3 30 |
| " " | " E. E. Smith, 6 mos'. services as Sec'y and Treas | 50 00 |
| " " | " W. B. Burford, 2,000 directories | 26 00 |
| " " | " Winona Normal School | 3 85 |
| " 19. | " laborer (removing boxes) | 75 |
| " " | " Jas. Bray (extra carpenter work) | 3 00 |
| " " | " B. Jefferson (hacks for Dr. Smart) | 9 50 |
| " " | " Treasurer (expenses remaining at Madison to close accounts) | 5 00 |
| " " | " Jas. Bray (lumber and labor for rotunda, Commercial Ex.) | 10 80 |
| Aug. 5. | Pd. Postage, expressage, drafts | 1 33 |
| " " | " Letter-heads used (6 mos.) | 2 00 |

| | | |
|---|---|---|
| Sept. 9. | Pd. Spring, Emerson & Co. (blanks) | $4 00 |
| " 18. | " J. J. Burns (expenses, Dept. 12) | 5 00 |

*Total Payments of Treasurer,* $781 43

| | |
|---|---|
| Total Receipts | $863 07 |
| Total Expenditures | 781 43 |
| Leaving balance in Treasurer's hands | $ 81 64 |
| Paid by return to N. A. Calkins, Treas. N. T. A. | $ 81 64 |

E. E. SMITH, *Treas. Nat. Ed. Ex.*

Examined and found correct:

Dec. 22, 1884. Chas. O. Thompson,
Dec. 27, 1884. Lucius Fairchild,
Larkin Dunton,
} *Auditing Committee.*

Respectfully presented
to T. W. BICKNELL, *President,* and
J. H. SMART, *Director.*

General John Eaton, Commissioner of Education, gave an encouraging and interesting Report of the International Congress of Educators, held at New Orleans in February, and also of the educational influences of the Exposition.

On motion of Mr. Sheldon, it was voted to authorize the Treasurer to receive pledges for five (5) years' memberships, as a means for a more permanent membership. The following form was approved:

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## NATIONAL EDUCATIONAL ASSOCIATION.

### FIVE YEARS' MEMBERSHIP.

Believing that the usefulness of this Association would be greatly enhanced by means of a more permanent membership, and in the further consideration that a copy of the Annual Volume of Proceedings shall be sent to such address as I shall request, I hereby agree to become a member of the National Educational Association for *five years,* and to pay the fees for said period whether I attend the meetings of the Association or not.

Fees, $2.00 a year, if paid annually.

(Date)..... 188

.....

(P. O. Address).....

Messrs. Bicknell, Canfield, and Barringer were appointed a Committee to secure Life Members at this session of the Association.

Voted to incorporate the report of the Committee appointed at Madison on the Drawing Department of the Exposition, which was not completed, owing to the decease of Dr. C. O. Thompson, the Chairman of the Committee, in the Volume of Proceedings for 1886. Voted, that it be suggested to the committee now engaged in preparing this report on the Art Exhibit at Madison to procure and embody in such report such data and notes as may have been prepared by Dr. Thompson.

Mr. Otto Fuchs, of Baltimore, Md., was added to this committee.

Dr. E. E. White, President of the Council of Education, explained the changes made in the Constitution of the Council relating to the election of new members of the Council, which will appear in the proceedings of that Board.

Messrs. White, Hagar, Fairchild, Jones, and Fuchs were designated as a committee to nominate eight members of the Council and report at the next meeting.

The Board of Directors voted to adjourn until the close of meeting of the morning session of the Association of Wednesday, the President to announce the place of holding the meeting.

W. E. SHELDON,
*Secretary.*

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## BOARD OF DIRECTORS—SECOND MEETING.

SARATOGA, *July* 15, 1885.

The Board of Directors met, according to adjournment, at the Methodist Church at 12.45 P.M., and was called to order by President Soldan. Minutes of Secretary read and approved.

Present, Messrs. Soldan, Hailmann, Jones, White, Fuchs, Eaton, Rounds, Gove, Bicknell, Peaslee, Canfield, Hall, Sheldon and Fairchild.

Dr. E. E. White, Chairman of the Committee to nominate New Members, made the following report, which was adopted unanimously :

*To the Board of Directors :*

Your committee beg leave to submit the following nominations :

1. For re-election, to serve six years:
   William T. Harris, Concord, Mass.; James H. Smart, Lafayette, Ind.
2. For election, to serve six years :
   George T. Fairchild, Manhattan, Kan.; Robert Allyn, Carbondale, Ill.

3. To serve four years:
Sarah E. Doyle, Providence, R. I.; John M. Ordway, New Orleans, La.
4. For two years:
E. E. Higbee, Harrisburg, Pa.; J. M. Greenwood, Kansas City, Mo.

In behalf of the committee,

E. E. WHITE,
*Chairman.*

Mr. Gove, of the Auditing Committee, reported that the committee had examined the accounts of the Treasurer, and found them correct and properly vouched, which was approved.

The Board adjourned to meet at the call of the President.

W. E. SHELDON,
*Secretary.*

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## BOARD OF DIRECTORS—THIRD MEETING.

The Board of Directors met in the Methodist Church at 12.45 P.M., President Soldan in the chair.

Present, Messrs. Fairchild, Fuchs, Peaslee, Eaton, Barringer, Soldan, Sheldon, Canfield.

There being no special business before the Board, there was a general discussion in regard to the distribution of the Volume of Proceedings.

Mr. Canfield read the following modification of the By-Law 4, which was referred to the new Board.

Substitute for By-Law 4. No paper, lecture, or address shall be read before the Association or any of its departments in the absence of its author, until the matter prepared and the reasons for the absence of the author have been submitted to the Board of Directors and received its approval.

E. E. White moved to amend by inserting after the word "Association" the following words, to wit: "upon approval of the Executive Committee."

That Article III., Sect. I., be so amended as to read "or any *educational* association," etc. Approved.

*Resolved,* That Article IV., Sect. I., be so amended as to read, "whenever a life member desires to become a *Life Director,* he shall be credited with the amount he has paid for his life membership and also with the amount of all donations he may have made to this Association." Approved.

## NEW BOARD OF DIRECTORS.

SARATOGA SPRINGS, *Friday, July* 17, 1885.

The new Board of Directors of the National Educational Association at the Bethesda Parish Home, at 1.30 P.M. The roll was called by the Secretary, and a quorum was present. The President elect, Norman A. Calkins, in the chair.

The question of place for holding the next meeting was discussed at length by representatives of Topeka, Kansas, and Denver, Colorado. A vote was taken, resulting in a tie between Topeka and Denver. The whole matter was then unanimously referred to the Executive Committee, consisting of the President, Secretary, Treasurer, the President of the National Council, and the Presidents of the several departments. The publication of the Volume of Proceedings for 1855, was referred, with full discretionary power, to the same committee. A general discussion followed upon the arrangement of programme, railroad matters, etc., and the Executive Committee was authorized to decide all such questions and make all arrangements for the next annual meeting.

Adjourned.

WILLIAM E. SHELDON.
*Secretary.*

SARATOGA SPRINGS, *July* 17, 1885.

The second meeting of the Board of Directors, was held at Bethesda Parish House, at 5 P.M., President Calkins in the chair. Minutes of the last meeting were read by the Secretary, and approved. After a general discussion of the interests of the Associations, and a reference of all details for the next annual meeting to the three executive officers—President, Secretary, and Treasurer—the directors adjourned.

W. E. SHELDON.
*Secretary.*

## SUMMARY OF TREASURER'S REPORT, 1884.

NATIONAL EDUCATIONAL ASSOCIATION IN ACCOUNT WITH N. A. CALKINS, TREASURER.

From July 1, 1884, to July 1, 1885.

| | | |
|---|---|---|
| Balance in Treasury, July 1, 1884 | | $5 33 |
| Received from 61 Life Memberships | $1,220 00 | |
| " " 2,739 Annual Memberships | 5,478 00 | |
| " " Sale Volumes Proceedings | 36 50 | |
| " " Postage for Mailing Volumes | 228 04 | |
| " " Balance of Funds on acc't National Educational Exposition, at Madison, Wis | 50 94 | |
| " " Interest on Permanent Fund | 12 00 | |
| " " Interest on Balance of Funds in Treasury, for 6 months | 90 00 | |
| Total Receipts for the Year | | $7,115 48 |
| | | $7,120 81 |

Disbursements on Account of Expenses during the year ending July 1, 1885.

| | | |
|---|---|---|
| By General Managers in 22 States | $472 51 | |
| " Superintendents of Transportation | 396 57 | |
| | | $869 08 |
| " President Bicknell while making Arrangements for the Meeting at Madison | 250 00 | |
| " Bill for Printing, Postage, Express, etc., incurred by President Bicknell | 240 00 | |
| " Sundry bills for printing by J. E. Farwell & Co., Boston | 134 28 | |
| " Sundry bills for printing by Alfred Mudge & Son, Boston | 51 65 | |
| " Bill for printing Testimonials, by J. A. Lowell & Co., Boston | 25 00 | |
| " Reporting Proceedings of Meeting at Madison | 175 00 | |
| " Printing and other expenses at Madison | 234 25 | |
| | | 1,110 18 |
| " Treasurer during the year | 124 40 | |
| " Secretary for Meeting | 11 08 | |
| " Expenses of Departments | 46 25 | |
| | | 181 73 |
| " Publishing 3,000 copies of the Proceedings of 1884 | 1,550 21 | |
| " Insurance, Express, Postage, and Mailing Volumes, 1884 | 404 33 | |
| | | 1,954 54 |
| " Amount invested at 6 per cent | | 3,000 00 |
| " Balance in Treasury July 1, 1885, Carried to Account for 1885 | | 5 28 |
| | | $7,120 81 |

The foregoing account of the Treasurer of the National Educational Association, for the year ending July 1, 1885, has been examined and found correct.

DANIEL B. HAGAR,
AARON GOVE,
EDWIN C. HEWETT, } *Auditing Committee.*

SARATOGA SPRINGS, N. Y., *July* 15, 1885.

# NATIONAL EDUCATIONAL ASSOCIATION
## OF THE UNITED STATES.

### OFFICERS FOR 1884-5.

### GENERAL ASSOCIATION.

F. LOUIS SOLDAN ..... ST. LOUIS, MO ..... *President.*
WILLIAM E. SHELDON ..... BOSTON, MASS ..... *Secretary.*
N. A. CALKINS ..... 124 EAST 80TH ST., NEW YORK, N. Y ..... *Treasurer.*

#### Vice-Presidents.

Thos. W. Bicknell, Massachusetts.
B. L. Butcher, W. Virginia.
A. J. Russell, Florida.
Thos. H. Payne, Tennessee.
Ed. Willetts, Michigan.
J. W. Holcombe, Indiana.
J. H. Canfield, Kansas.
Thos. Hunter, New York.
W. H. Chandler, Wisconsin.
E. E. Higbee, Penusylvania.
C. L. Sampson, Arkansas.
J. A. Smith, Mississippi.

#### Councilors-at-Large.

Hon. John Eaton, Washington, D. C.
W. T. Harris, Massachusetts.

#### Councilors.

W. J. Corthell, Maine.
C. C. Rounds, New Hampshire.
J. M. Hitt, Vermont.
T. B. Stockwell, Rhode Island.
S. T. Dutton, Connecticut.
S. A. Ellis, New York.
W. N. Barringer, New Jersey.
H. S. Jones, Pennsylvania.
M. A. Newell, Maryland.
S. C. Armstrong, Virginia.
F. A. Crago, W. Virginia.
Rob't Bingham, No. Carolina.
V. C. Dibble, So. Carolina.
G. J. Orr, Georgia.
B. T. Washington, Alabama.
Walter Hillmann, Mississippi.
Wm. Preston Johnson, Louisiana.
O. V. Hayes, Arkansas.
W. C. Karnes, Tennessee.
W. D. Parker, Wisconsin.
R. D. Allen, Kentucky.
John B. Peaslee, Ohio.
Henry Raab, Jlilnois.
W. D. Hill, Indiana.
A. H. Seerley, Iowa.
D. H. Kiehle, Minnesota.
J. S. Cowdon, Florida.
Geo. T. Fairchild, Kansas.
J. M. Greenwood, Missouri.
G. S. Farnham, Nebraska.
H. B. Norton, California.
J. C. Shattuck, Colorado.
G. C. Hall, Arizona.
F. H. Crawford, Oregon.
John Baldwin, Texas.
J. M. Coyner, Utah.
W. H. Beadle, Dakota.
A. S. Nichols, Montana.
Z. Richards, Dist. of Columbia.
J. H. Covel, Indian Territory.
W. C. Young, Nevada.
D. B. Hagar, Massachusetts.
Sheldon Jackson, Alaska.
W. S. Perry, Michigan.
Aaron Gove, Colorado.

### ELEMENTARY DEPARTMENT.

W. N. BARRINGER ..... NEWARK, N. J ..... *President.*
A. R. TAYLOR ..... EMPORIA, KAN ..... *Vice-President.*
ELLA CALKINS ..... 124 E. 80TH ST., NEW YORK, N. Y ..... *Secretary.*

### DEPARTMENT OF NORMAL SCHOOLS.

GEORGE P. BROWN ..... TERRE HAUTE, IND ..... *President.*
JOHN BALDWIN ..... HUNTSVILLE, TEXAS ..... *Vice-President.*
SARAH E. SPRAGUE ..... WINONA, MINN ..... *Secretary.*

### DEPARTMENT OF HIGHER INSTRUCTION.

LEMUEL MOSS ..... BLOOMINGTON, IND ..... *President.*
JOHN BASCOM ..... MADISON, WIS ..... *Vice-President.*
W. G. WILLIAMS ..... OHIO ..... *Secretary.*

### DEPARTMENT OF SUPERINTENDENCE.

LEROY D. BROWN ..... COLUMBUS, O ..... *President.*
W. O. ROGERS ..... NEW ORLEANS, LA ..... *Secretary.*

### INDUSTRIAL DEPARTMENT.

H. H. BELFIELD ..... CHICAGO, ILL ..... *President.*
JAMES MACALISTER ..... PHILADELPHIA, PENN ..... *Vice-President.*
S. H. THOMPSON ..... LINCOLN, NEB ..... *Secretary.*

### DEPARTMENT OF ART EDUCATION.

OTTO FUCHS ..... BALTIMORE, MD ..... *President.*
WALTER S. PERRY ..... WORCESTER, MASS ..... *Vice-President.*
JOSEPHINE C. LOCKE ..... ST. LOUIS, MO ..... *Secretary.*

### KINDERGARTEN DEPARTMENT.

W. N. HAILMANN ..... LA PORTE, IND ..... *President.*
B. B. HUNTOON ..... LOUISVILLE, KY ..... *Vice-President.*
S. A. VAN NOTE ..... LA PORTE, IND ..... *Secretary.*

### DEPARTMENT OF MUSIC EDUCATION.

DANIEL B. HAGAR ..... SALEM, MASS ..... *President.*
O. S. WESTCOTT ..... CHICAGO, ILL ..... *Vice-President.*
T. B. BRAND ..... MADISON, WIS ..... *Secretary.*

### NATIONAL COUNCIL OF EDUCATION.

EMERSON E. WHITE ..... CINCINNATI, O ..... *President.*
DANIEL B. HAGAR ..... SALEM, MASS ..... *Vice-President.*
GEORGE P. BROWN ..... TERRE HAUTE, IND ..... *Secretary.*

# NATIONAL EDUCATIONAL ASSOCIATION

## OF THE UNITED STATES.

### OFFICERS FOR 1885-6.

### GENERAL ASSOCIATION.

N. A. CALKINS ..... New York ..... *President.*
WILLIAM E. SHELDON ..... Boston, Mass. ..... *Secretary.*
EDWIN C. HEWETT ..... Normal, Ill. ..... *Treasurer.*

#### Vice-Presidents.

F. Louis Soldan, Missouri.
S. T. Dutton, Connecticut.
James MacAlister, Pennsylvania.
Le Roy D. Brown, Ohio.
Julius D. Dreher, Virginia.
S. M. Finger, North Carolina.
Edward E. Sheib, Louisiana.
J. Baldwin, Texas.
J. W. Stearns, Wisconsin.
Joseph L. Pickard, Iowa.
Ella C. Sabin, Oregon.
Zalmon Richards, Dis. of Columbia.

#### Councilors-at-Large.

Hon. John Eaton, Washington, D. C.
Emerson E. White, Cincinnati, Ohio.

#### Councilors.

W. J. Corthell, Maine.
C. C. Rounds, New Hampshire.
Justus Dart, Vermont.
Larkin Dunton, Massachusetts.
Sarah E. Doyle, Rhode Island.
Charles D. Hine, Connecticut.
C. D. McLean, New York.
W. N. Barringer, New Jersey.
H. S. Jones, Pennsylvania.
G. Stanley Hall, Maryland.
S. C. Armstrong, Virginia.
S. B. Brown, West Virginia.
Charles E. Taylor, North Carolina.
V. C. Dibble, South Carolina.
J. M. F. Irving, Georgia.
Julia Tutweiler, Alabama.
J. R. Preston, Mississippi.
E. Nicholson, Louisiana.
O. V. Hayes, Arkansas.
Clara Conway, Tennessee.
W. D. Parker, Wisconsin.
R. D. Allen, Kentucky.
R. W. Stevenson, Ohio.
O. S. Westcott, Illinois.
S. S. Parr, Indiana.
W. H. Payne, Michigan.
Henry Sabin, Iowa.
Irwin Shepard, Minnesota.
J. S. Cowdon, Florida.
H. C. Speer, Kansas.
E. H. Long, Missouri.
W. W. W. Jones, Nebraska.
John Swett, California.
Aaron Gove, Colorado.
G. C. Hall, Arizona.
F. H. Crawford, Oregon.
J. M. Fendley, Texas.
J. M. Coyner, Utah.
W. H. Beadle, Dakota.
A. S. Nichols, Montana.
John Hitt, Dist. Columbia.
J. H. Covel, Indian Territory.
Chas. Young, Nevada.
J. S. Ingraham, Washington Ter.

### DEPARTMENTS.

#### School Superintendence.

WARREN EASTON ..... *President* ..... Baton Rouge, La.
A. P. STONE ..... *Vice-President* ..... Springfield, Mass.
C. C. DAVIDSON ..... *Secretary* ..... New Lisbon, O.

#### Higher Instruction.

JEROME ALLEN ..... *President* ..... New York.
ELIAB W. COY ..... *Vice-President* ..... Cincinnati, O.
E. J. JAMES ..... *Secretary* ..... Philadelphia, Pa.

#### Normal Schools.

ALBERT G. BOYDEN ..... *President* ..... Bridgewater, Mass.
GEO. L. OSBORNE ..... *Vice-President* ..... Warrensburg, Mo.
E. H. COOK ..... *Secretary* ..... Potsdam, N. Y.

#### Industrial Education.

JAMES MacALISTER ..... *President* ..... Philadelphia, Pa.
JOHN M. ORDWAY ..... *Vice-President* ..... New Orleans, La.
W. F. M. GOSS ..... *Secretary* ..... Lafayette, Ind.

#### Art Education.

WALTER S. GOODNOUGH ..... *President* ..... Columbus, O.
CHARLES M. CARTER ..... *Vice-President* ..... Boston, Mass.
VIENNA DODGE ..... *Secretary* ..... Winona, Minn.

#### Music Education.

G. STANLEY HALL ..... *President* ..... Baltimore, Md.
O. S. WESTCOTT ..... *Vice-President* ..... Chicago, Ill.
T. H. BRAND ..... *Secretary* ..... Madison, Wis.

#### Kindergarten Instruction.

W. N. HAILMANN ..... *President* ..... La Porte, Ind.
J. W. DICKINSON ..... *Vice-President* ..... Boston, Mass.
MISS S. A. VAN NOTE ..... *Secretary* ..... La Porte, Ind.

#### Elementary Schools.

JOHN W. HOLCOMBE ..... *President* ..... La Porte, Ind.
L. R. KLEMM ..... *Vice-President* ..... Indianapolis, Ind.
MARGARET W. SUTHERLAND ..... *Secretary* ..... Mansfield, O.
MRS. EVA D. KELLOGG ..... *Asst. Secretary* ..... Charlotte, N. C.

#### National Council of Education.

DANIEL B. HAGAR ..... *President* ..... Salem, Mass.
H. S. JONES ..... *Vice-President* ..... Erie, Pa.
GEORGE P. BROWN ..... *Secretary and Treasurer* ..... Terre Haute, Ind.

# CALENDAR OF MEETINGS.

## NATIONAL TEACHERS' ASSOCIATION.

1857.—PHILADELPHIA, PA.
Organized.
James L. Enos, Chairman.
W. E. Sheldon, Sec.

1858.—CINCINNATI, OHIO.
Z. Richards, Pres.
J. W. Bulkley, Sec.
A. J. Rickoff, Treas.

1859.—WASHINGTON, D. C.
A. J. Rickoff, Pres.
J. W. Bulkley, Sec.
C. S. Pennell, Treas.

1860.—BUFFALO, N. Y.
J. W. Bulkley, Pres.
Z. Richards, Sec.
O. C. Wight, Treas.

1861, 1862.—No Session.

1863.—CHICAGO, ILL.
John D. Philbrick, Pres.
James Cruikshank, Sec.
O. G. Wight, Treas.

1864.—OGDENSBURG, N. Y.
W. H. Wells, Pres.
David N. Camp, Sec.
Z. Richards, Treas.

1865.—HARRISBURG, PA.
S. S. Greene, Pres.
William E. Sheldon, Sec.
Z. Richards, Treas.

1866.—INDIANAPOLIS, IND.
J. P. Wickersham, Pres.
S. H. White, Sec.
S. P. Bates, Treas.

1867.—No Session.

1868.—NASHVILLE, TENN.
J. M. Gregory, Pres.
L. Van Bokkelen, Sec.
James Cruikshank, Treas.

1869.—TRENTON, N. J.
L. Van Bokkelen, Pres.
W. E. Crosby, Sec.
A. L. Barber, Treas.

1870.—CLEVELAND, OHIO.
Daniel B. Hagar, Pres.
A. P. Marble, Sec.
W. E. Crosby, Treas.

NAME CHANGED TO

## NATIONAL EDUCATIONAL ASSOCIATION.

1871.—St. LOUIS, MO.
J. L. Pickard, Pres.
W. E. Crosby, Sec.
John Hancock, Treas.

1872.—BOSTON, MASS.
E. E. White, Pres.
S. H White, Sec.
John Hancock, Treas.

1873.—ELMIRA, N. Y.
B. G. Northrop, Pres.
S. H. White, Sec.
John Hancock, Treas.

1874.—DETROIT, MICH.
S. H. White, Pres.
A. P. Marble, Sec.
John Hancock, Treas.

1875.—MINNEAPOLIS, MINN.
W. T. Harris, Pres.
W. R. Abbot, Sec.
A. P. Marble, Treas.

1876.—BALTIMORE, MD.
W. F. Phelps, Pres.
W. D. Henkle, Sec.
A. P. Marble, Treas.

1877.—LOUISVILLE, KY.
M. A. Newell, Pres.
W. D. Henkle, Sec.
J. Ormond Wilson, Treas.

1878.—No Session.

1879.—PHILADELPHIA, PA.
John Hancock, Pres.
W. D. Henkle, Sec.
J. Ormond Wilson, Treas.

1880.—CHAUTAUQUA, N. Y.
J. Ormond Wilson, Pres.
W. D. Henkle, Sec.
E. T. Tappan, Treas.

1881.—ATLANTA, GA.
James H. Smart, Pres.
W. D. Henkle, Sec.
Eli T. Tappan, Treas.

1882.—SARATOGA SPRINGS, N. Y.
G. J. Orr, Pres.
W. E. Sheldon, Sec.
H. S. Tarbell, Treas.

1883.—SARATOGA SPRINGS, N. Y.
Eli T. Tappan, Pres.
W. E. Sheldon, Sec.
N. A. Calkins, Treas.

1884.—MADISON, WIS.
Thomas W. Bicknell, Pres.
H. S. Tarbell, Sec.
N. A. Calkins, Treas.

1885.—SARATOGA SPRINGS, N. Y.
F. Louis Soldan, Pres.
W. E. Sheldon, Sec.
N. A. Calkins, Treas.

# CONSTITUTION

OF THE

# NATIONAL EDUCATIONAL ASSOCIATION.

---

## PREAMBLE.

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

## CONSTITUTION.

[*As amended July* 13 *and* 16, 1880.]

### ARTICLE I.—NAME.

This Association shall be styled the National Educational Association.

### ARTICLE II.—DEPARTMENTS.

[*As amended July,* 1883 *and* 1884.]

SECTION 1. It shall consist of eight departments: the first, of School Superintendence; the second, of Normal Schools; the third, of Elementary Schools; the fourth, of Higher Instruction; the fifth, of Industrial Education; the sixth, of Art Education; the seventh, of Kindergarten Instruction; the eighth, of Music Education; and a National Council of Education.

SECT. 2. Other departments may be organized in the manner prescribed in this Constitution.

### ARTICLE III.—MEMBERSHIP.

[*As amended July,* 1884, 1885.]

SECTION 1. Any person in any way connected with the work of education, or any Educational Association, shall be eligible to membership. Such person or Association may become a member of this Association by paying two dollars and signing this Constitution, and may continue a member by the payment of an annual fee of two dollars. On neglect to pay such fee, the membership will cease.

SECT. 2. Each department may prescribe its own conditions of membership, provided that no person be admitted to such membership who is not a member of the general Association.

SECT. 3. Any person eligible to membership may become a life-member by paying at once twenty dollars.

## ARTICLE IV.—OFFICERS.

[*As amended July*, 1884 *and* 1885.]

SECTION 1. The officers of this Association shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, one Councilor for each State, District, or Territory represented in the Association, and the officers charged with the administration of their respective departments. Any friend of education may become a life-director by the donation of one hundred dollars to the Association at one time, either by himself or on his behalf; and any educational association may secure a perpetual directorship by a like donation of one hundred dollars, the director to be appointed annually or for life. Whenever a life-member desires to become a life-director, he shall be credited with the amount he has paid for his life-membership.

SECT. 2. The President, Vice-Presidents, Secretary, Treasurer, Councilors, Life-Directors, President of the Council, and presiding officers of their respective departments shall constitute the Board of Directors, and, as such, shall have power to appoint such committees from their own number as they shall deem expedient.

SECT. 3. The elective officers of the Association shall be chosen by ballot, unless otherwise ordered, on the second day of each annual session, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual session subsequent to their election, and until their successors are chosen.

SECT. 4. Each department shall be administered by a President, Vice-President, Secretary, and such other officers as it shall deem necessary to conduct its affairs.

SECT. 5. The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence, the first Vice-President in order who is present shall preside; and in the absence of all Vice-Presidents, a *pro tempore* chairman shall be appointed on nomination, the Secretary putting the question.

SECT. 6. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the Association and all meetings of the Board of Directors, and shall conduct such correspondence as the Directors may assign, and shall have his records present at all meetings of the Association and of the Board of Directors. The Secretary of each department shall, in addition to performing the duties usually pertaining to his office, keep a list of the members of his department.

SECT. 7. The Treasurer shall receive and hold in safe keeping all moneys paid to the Association, shall expend the same only upon the order of the Committee of Finance, shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts he shall render to the Board of Directors prior to each regular meeting of the Association, and shall also present an abstract thereof to the Association. He shall give bond for the faithful discharge of his duties as may be required by the Board of Directors. The Treasurer's term of office shall continue till the settlement of the business of the session for which he is elected.

SECT. 8. The Board of Directors shall have power to fill all vacancies in their own body, shall have in charge the general interests of the Association, shall make all necessary arrangements for its meetings, and shall do all in its power to make it a useful and honorable institution. Upon the written application of twenty members of the Association for permission to establish a new department, they may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the others. The formation of such department shall in effect be a

sufficient amendment to this Constitution for the insertion of its name in Article II., and the Secretary shall make the necessary alterations.

SECT. 9. The Board of Directors shall appoint three Trustees, into whose hands shall be placed for safe keeping and investment all funds which the Association may receive from the creation of life-directorships, or from donations, unless the donors shall specify other purposes for which they may be used. The income of such funds so invested shall be used exclusively in defraying the expense of publishing the annual volume of the Association, unless the donors shall specify otherwise. The Board of Directors shall require such Trustees to give to the Association their joint bond in a sum equal to twice the amount of such trust fund as may be in their hands.

## ARTICLE V.—MEETINGS.

SECTION 1. The annual meeting of the Association shall be held at such time and place as shall be determined by the Board of Directors.

SECT. 2. Special meetings may be called by the President at the request of five Directors.

SECT. 3. Any department of the Association may hold a special meeting at such time and place as by its own regulations it shall appoint.

SECT. 4. The Board of Directors shall hold their regular meetings at the place, and not less than two hours before the assembling of the Association.

SECT. 5. Special meetings may be held at such other times and places as the Board or the President shall determine.

SECT. 6. Each new Board shall organize at the session of its election. At its first meeting a Committee on Publication shall be appointed, which shall consist of the Secretary of the Association for the previous year, and one member from each department.

## ARTICLE VI.—BY-LAWS.

By-laws, not inconsistent with this Constitution, may be adopted by a two-thirds vote of the Association.

## ARTICLE VII.—AMENDMENTS.

This Constitution may be altered or amended at a regular meeting by the unanimous vote of the members present, or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

## BY-LAWS.

1. At each regular meeting of the Association there shall be appointed a Committee on Nominations, one on Honorary Members, and one on Resolutions.

2. The President, First Vice-President, and Secretary shall constitute a Committee on Finance.

3. Each paying member of the Association shall be entitled to a copy of its Proceedings.

4. No paper, lecture, or address shall be read before the Association or any of its departments in the absence of its author, nor shall any such paper, lecture or address be published in the volume of Proceedings without the consent of the Association, upon approval of the Executive Committee.

# MEMBERSHIP

OF THE

# NATIONAL EDUCATIONAL ASSOCIATION.

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The *dates* in the margin indicate the year in which the several memberships began. The addresses given remain the same as last year, except in cases where information of change of residence has been furnished. Where there is a reasonable doubt as to the residence, it is indicated by (?). The * indicates the decease of the member. The names printed in *Italics* represent those who attended the meeting at Saratoga Springs.

## PERPETUAL DIRECTORSHIP.

### PENNSYLVANIA.

1879. Philadelphia Teachers' Institute.
Represented in 1883, '84 and '85 by *M. A. Sickel.*

## LIFE DIRECTORS.

### NEW YORK.

1881. Rickoff, Andrew J., Yonkers.

1885. *Hall, Caleb G.*, New Berlin.

### WEST VIRGINIA.

1877. Marshall, T. Marcellus, Glenville.

# LIFE MEMBERSHIPS.

## ALABAMA.

1881. Woodward, G. A., Selma (?).

## COLORADO.

1883. *Gove, Aaron,* Denver.

## CONNECTICUT.

1864. *Barnard, Henry,* Hartford.
1884. *Northrop, Birdsey G.,* Clinton.
1870. *Stone, Mrs. M. A.,* New Milford.

## DISTRICT OF COLUMBIA.

1884. Bell, Alex. Graham, Washington.
1880. *Hitz, John,* Washington.
1864. *Richards, Zalmon,* Washington.
1880. Wilson, J. Ormond, Washington.

## GEORGIA.

1881. Mallon, Mrs. Francis C., 16 East Cain St., Atlanta.
1880. Setzepfand, A., Dalton (?).

## ILLINOIS.

1870. Allen, Ira W., 1832 Michigan Boulevard, Chicago.
1884. *Allyn. Robert,* Normal School, Carbondale.
1884. Cheny, Augustus J., 149 Wabash Ave., Chicago.
1864. Eberhardt, J. F., Irving Park, Chicago.
1876. Forbes, Alex., 369 Wabash Ave., Chicago.
1884. Hayward, Emily A., 932 S. 4th St., Springfield.
1884. *Hewett, Edwin C.,* Normal.
1884. Raab, Henry, State Supt., Springfield.
1876. Schmitz, J. Adolph, Elgin.
1864. * White, S. H.

## INDIANA.

1876. Bell, W. A., Indianapolis.
1880. *Brown, Geo. P.,* Terre Haute.
1870. Hobbs, B. C., Bloomingdale.
1880. Irwin, J. S., Fort Wayne.
1866. McRae, H. S., Marion.
1879. * Mills, Caleb.
1877. *Smart, James H.,* La Fayette.
1876. Stevens, M. C., La Fayette.
1876. Thompson, L. S., La Fayette.

## IOWA.

1876. Armstrong, Allen, Sioux City.
1870. Crosby, W. E., Des Moines (?).
1880. Gilchrist, J. C., Cedar Falls.
1884. Taylor, Henry J., Sioux City.
1864. * Wells, D. F.
1884. Willis, Wm. A., Iowa City.

## KANSAS.

1883. *Taylor, A. R.,* Normal School, Emporia.

## KENTUCKY.

1877. Bartholomew, W. C., Female High School, Louisville.
1877. Kalfus, Anna F., 732 Second St., Louisville.
1877. Monsarrat, Mrs. L. L., Louisville.

## MARYLAND.

1876. Newell, M. A., Normal School, Baltimore.
1876. Richmond, Sarah E., Baltimore (?).

## MASSACHUSETTS.

1882. *Bicknell, Thos. W.*, 3 Somerset St., Boston.
1864. *Hagar, Daniel B.*, Normal School, Salem.
1876. *Harris, Wm. T.*, Concord.
1870. Jones, D. W., Roxbury, Boston.
1880. *Marble, Albert P.*, Supt. Schools, Worcester.
1865. *Sheldon, Wm. E.*, 3 Somerset St., Boston.
1870. Tourjee, Eben, Boston.
1870. Wilcox, M. C., Boston (?).

## MICHIGAN.

1870. Heywood, C. W., Scotts, Kalamazoo Co.
1866. Mayhew, Ira, 119 Griswold St., Detroit.

## MINNESOTA.

1870. *Phelps, Wm. F.*, Supt. Schools, Winona.

## MISSOURI.

1880. Bibb-Sudborough, Grace C., Omaha (?)
1864. Pennell, C. S., 3692 Pine St., St. Louis.
1870. * Read, Daniel.
1876. *Rollins, James S.*, State University, Columbia.
1877. *Soldan, F. Louis*, Normal School, St. Louis.

## NEBRASKA.

1876. Beals, S. D., 2118 Davenport St., Omaha.
1884. Curry, Robert, Palmyra.
1884. James, Henry M., Supt. Schools, Omaha.

## NEW HAMPSHIRE.

1876. *Rounds, C. C.*, Normal School, Plymouth.

## NEW JERSEY.

1880. Spring, E. A., Perth Amboy.

## NEW YORK.

1871. *Anderson, John J.*, 343 Adelphi Street, Brooklyn, N. Y.
1864. Bradley, P., Lyons (?).
1879. *Calkins, N. A.*, 124 East 80th St., New York.
1880. Coe, Miss E. M., Bible House, New York.
1883. *Corey, Lucien B.*, Hicksville, Queens Co.
1864. Cruikshank, James, Oxford St., Brooklyn.
1864. *Danforth, Edward*, Elmira.
1883. *Day, Mrs. Albert*, 240 Broadway, New York.
1876. Dorna, G. Videlia, New York (?).
1873. *Haines, Mrs. H. B.
1882. Hodgdon, Josephine E., High School, Brooklyn, N. Y.
1879. *Hoose, James H.*, Normal School, Cortlandt.
1885. *Hunter, Thomas*, Normal College, New York.
1879. Kraus, John, 7 East 22d St, New York.
1882. Morris, Hattie N., Brooklyn, N. Y.
1870. Rickoff, And. J., Yonkers.
1880. Rickoff, Mrs. R. D., Yonkers.
1883. *Steele, J. Dorman*, Elmira.
1882. *Stern, M.*, 27 East 44th St., New York.
1884. *Van Akin, Mrs. G.*, 63 Park St., New York.

## NORTH CAROLINA.

1881. Bingham, Robert, Bingham School.

## OHIO.

1870. Arey, Oliver, Cleveland.
1884. Bennett, C. W., Supt. Schools, Piqua.
1880. Bennett, Hampton, Franklin.
1880. *Brown, Le Roy D.*, State Com. Schools, Columbus.
1880. Burns, J. J., Supt. Schools, Dayton.
1870. Cole, W. H., Marysville.
1883. *Coy, Eliab W.*, Hughes High School, Cincinnati.
1866. Curran, U. T., Sandusky.
1880. *Davidson, C. C.*, New Lisbon.
1881. De Wolf, Daniel F., Columbus (?).
1880. *Dutton, Bettie A.*, 94 State St., Cleveland.
1876. *Hancock, John*, Dayton.
1865. Hartshorn, O. N., Mount Union.
1883. *Harvey, Thomas W.*, Painesville.
1876. *Henkle, W. D.
1870. Holden, L. E., Cleveland.
1879. McMillan, Reuben, Youngstown.
1880. McMillan, Mrs. S., Youngstown.
1880. Miller, Lewis, Akron.
1880. *Norris, J. A.
1880. *Peaslee, John B.*, Supt. Schools, Cincinnati.
1882. Robert, J. A., Dayton.
1880. *Stevenson, R. W.*, Supt. Schools, Columbus.
1882. *Tappan, Eli T.*, Kenyon College, Gambier.
1870. *White, Emerson E.*, Walnut Hills, Cincinnati.
1880. Widner, Esther, Dayton.
1870. *Williams, Mrs. D. A.* (Lathrop) Delaware.

## PENNSYLVANIA.

1876. *Brooks Edward*, 1416 Chestnut st., Philadelphia.
1879. Foster, Rachel Gordon, Philadelphia (?).
1879. Gratz, Simon, Philadelphia.
1865. Ingram, S. D., Harrisburg.
1880. Partridge, Lelia E., West Philadelphia.
1879. Paxon, Joseph A., Philadelphia (?).
1879. Shippen, Edward, Philadelphia.
1880. *Singer, Edgar A.*, 4764 Penn St., Philadelphia.
1865. *Wickersham, James P.*, Lancaster.

## RHODE ISLAND.

1865. *Greene, Samuel S.
1872. Stone, E. M., Providence.

## TEXAS.

1877. Franklin, M. B., Grapevine (?).

VIRGINIA.

1870. Manly, R. M., Richmond.
1870. *McGuffey, W. H.

WISCONSIN.

1884. Albee, George S., Normal School, Oshkosh.
1884. Aylward, John Arthur, Black Earth.
1884. Bascom, John, Pres. University, Madison.
1884. Beck, George, Platteville.
1884. Carpenter, J. H., Madison.
1884. Chandler, W. H., Madison.
1884. Charlton, E. A., Brodhead.
1884. Clark, L. H., Tomah.
1884. Eden, Philip, Platteville.
1884. Emery, J. Q., Fort Atkinson.
1884. Flavin, J. T., Watertown.
1884. Graham, Robert, State Supt., Madison.
1884. Harvey, Lorenzo Dow, Sheboygan.
1884. Howland, H. C., Eau Claire.
1870. Hoyt, J. W., —— (?)
1884. Nye, Charles H., Platteville.
1884. Parkinson, John B., University, Madison.
1884. Parker, Warren D., Normal School, River Falls.
1884. Rusk, Gov. J. M., Madison.
1884. Shaw, Samuel, Antigo.
1884. Stark, Joshua, Milwaukee.
1884. Stewart, Sarah A., Milwaukee.
1884. Stewart, I. N., Appleton.
1884. Stearns, J. W., University, Madison.
1884. Thayer, J. B., River Falls.
1884. Twining, N. C., Monroe.
1884. Whitford, William C., Pres. Col., Milton.

## PERPETUAL MEMBERSHIPS.

### BOARDS OF EDUCATION IN WISCONSIN.

1884. Board of Education—City of Milwaukee.
1884. Board of Education—City of Janesville.
1884. Board of Education—City of Oshkosh.
1884. Board of Education—City of La Crosse.
1884. Board of Education—City of Beloit.
1884. Board of Education—City of Watertown.

### INSTITUTIONS AND SOCIETIES IN WISCONSIN.

1884. Alumni Association of City Normal School of Milwaukee.
1884. Athenæum Literary Society, State Normal School, Platteville.
1884. Board of Regents of State Normal Schools of Wisconsin.
1884. Milwaukee County Teachers' Association.
1884. Milwaukee Spencerian Business College.
1884. Principals' Association of Milwaukee.
1884. Intermediate and Upper Sections, Milwaukee Teachers' Corps.
1884. Primary Section, Milwaukee Teachers' Corps.
1884. Philadelphian Society, State Normal School, Platteville. *J. A. James*, Representative for 1885.
1884. Public School Teachers of Janesville.
1884. State Normal School, Platteville.
1884. Wisconsin Principals' Association. *W. H. Beach*, Madison, Representative for 1884, and 1885.
1884. Wisconsin Teachers' Association.
1884. Wisconsin County Superintendents' Association.

# ANNUAL MEMBERSHIPS

## FOR THE YEAR ENDING JULY 1ST, 1886.

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### ALABAMA.

Massey, John, Tuskega.

### COLORADO.

Beggs, Robert H., Denver.

Nelson, Mary S., Central City.

### CONNECTICUT.

Abbott, Mary M., Hillside Ave. Sch., Waterbury.
Brockelsby, John H., 274 Main St., Hartford.
Burwell, H. R., No. Quinnipiack St., New Haven.
Burwell, L. G., No. Quinnipiack St., New Haven.
Camp, David N., New Britain.
Chapin, J. H., Meriden.
Dutton, S. T., Supt. Schools, 124 High St., New Haven.
French, J. R., 64 Whitney Ave., New Haven.
Livingston, Mrs. M. L., 466 Howard Ave., New Haven.
Patterson, Thos. H., West Suffield.
Pitman, Mark, Woolsey School, New Haven.
Root, J. Henry, Greenwich.
Scarborough, Emily, Danielsonville.
Stanton, Miss L. A., Norwich.
Twitchell, W. I., Hartford.
Ufford, J. E., 254 Crown St., New Haven.
Wakeman, Sarah C., Box 816, Stamford.
Whitney, Anna L., Thompsonville.

### DAKOTA TERRITORY.

Richardson, C. L., Madison.

### DISTRICT OF COLUMBIA.

Coleman, Norman J., Com. Agriculture, Washington.
Eaton, Hon. John, U. S. Com. Education, 712 East Capitol St., Washington.
Hampson, Thomas, U. S. Geological Survey, Washington.
Crosby, Fannie S., Bureau of Education, Washington.

## GEORGIA.

Erwin, John M. F., Feagin.

## ILLINOIS.

Anthony, Pamela, Sterling.
Belfield, H. H., 5734 Madison Ave., Chicago.
Blanchard, C. A., Wheaton.
Brockway, Mrs. L. F., Times Building, Chicago.
Dimock, Mrs. E. F., 159 Warren Ave., Chicago.
Dodge, Chester C., Oakley School, Chicago.
Grace, S. J., 220 Marshfield Ave., Chicago.
Hartman, Mary, Normal.
Holbrook, Florence, 3821 Longley Ave., Chicago.
Horton, Clara O., 508 No. Broad St., Galesburg.
Johnson, Lucia, Jefferson School, Chicago.
Lennon, Anthony, 1098 W. Madison St., Chicago.
Little, Luella V., 283 W. Adams St., Chicago.
Lunery, Oscar F., Wheaton.
Martin, Anna B., Clyde.
Martin, D. R., Pullman.
McFarlane, Walter, Oswego.
McKay, F. M., 134 Warren Ave., Chicago.
Morris, J. E., Arcola.
Peabody, S. H., Champaign.
Rathbun, W. P., Pecatonica, Winnebago Co.
Rice, Mrs. M. S. B., Walsh School, Chicago.
Slade, James P., Greenville.
Smith, Harold, 180 Wabash Ave., Chicago.
Smythe, W. S., 180 Wabash Ave., Chicago.
Stevenson, E. L., Gilman.
Thomas, Rev. H. W., 535 Monroe St., Chicago.
Thomas, Mrs. C. E., 535 Monroe St., Chicago.
Vaile, E. O., Oak Park, Chicago.
Van Santford, Nellie, Sterling.
Waterman, A. N., 456 W. Randolph St., Chicago.
Waterman, Mrs. A. N., 456 W. Randolph St., Chicago.
Westcott, Oliver S., Chicago.

## INDIANA.

Cooper, Mrs. M. J., 477 No. Meridian St., Indianapolis.
Cropsey, Miss N., 85 College Ave., Indianapolis.
Goss, W. F. M., La Fayette.
Hailmann, Wm. N., Supt. Schools, La Porte.
Hailmann, Mrs. Eudora, La Porte.
Holcombe, John W., State Supt., State Building, Indianapolis.
Horney, Lizzie, 327 No. 8th St., Richmond.
Jones, L. H., 92 No. Pennsylvania Ave., Indianapolis.
Martin, Lillie J., High School, Indianapolis.
Morris, Miss Ruth, 441 No. 7th St., Terre Haute.
Nicholson, Miss M. E., 232 Broadway, Indianapolis.
Parr, S. S., Greencastle.
Robson, Kate, 186 E. Michigan Ave., Indianapolis.
Smith, Edward E., La Fayette.
Zeller, William, Henryville, Clark Co.

## INDIAN TERRITORY.

Covel, J. H., Cherokee Orphan Asylum, Salina.

## IOWA.

Carroll, L. A., New Hampton.
Derby, L., Ackley.
Derby, Mrs. L., Ackley.
Fellows, Stephen N., State University, Iowa City.
Gerlinger, Clara, 324 No. 6th St., Burlington.
Illsley, Helen, Des Moines.
Illsley, M. A., 545 Ninth St., Des Moines.
Jones, Will. W., Waukon.
Mayer, Chas. D., Supt. Schools., Waterloo.
McDougal, Miss L., Independence.
Otes, D. W., Council Bluffs.
Reardon, P. H., Ottumwa.
Rogers, C. P., Marshalltown.
Seerley, Homer H., Oskaloosa.
Snelling, Nellie, Marshalltown.
Torrance, Nannie, Sigourney.
Van de Ven, Mrs. H., Pella, Marion Co.
Wilson, Mrs. L. M., Supt. Schools, Des Moines.

## KANSAS.

Canfield, James H., Lawrence.
Fairchild, Geo. T., Manhattan.
Goodspeed, Edith M., Topeka.
Lawhead, J. H., 97 Van Buren St., Topeka.
Lippincott, J. A., Kansas University, Lawrence.
Newton, A. H., Florence.
Sherrill, Miss H. E., 116 Western Ave., Topeka.
Sherrill, Miss M. S., 116 Western Ave., Topeka.
Speer, H. C., 64 Kansas Ave., Topeka.
Stearns, Geo. M., Washburn College, Topeka.
Tillotson, D. C., Supt. Schools, Topeka.

## KENTUCKY.

Albreicht, Louise, 643 Second St. Louisville.
Harris, Mrs. L. L., Mount Sterling.

## LOUISIANA.

Bettison, Ulric, Supt. Schools, 513 No. Clarborn St., New Orleans.
Easton, Warren, Supt. Schools, Baton Rouge.
Ordway, John M., Tulane University, New Orleans.
Ordway, Mrs. E. W., Tulane University, New Orleans.
Seamon, J. E., 67 Coliseum St., New Orleans.
Sheib, Edward E., State Normal School, Natchitoches.
Woodward, W., Tulane University, New Orleans.

## MAINE.

Jones, Stephen A., China.
Schouler, Miss J. E., Kennebunk.

## MARYLAND.

Fuchs, Otto, Maryland Institute, Baltimore.

MASSACHUSETTS.

Adams, Charles F., 2 Normal St., Worcester.
Adams, W. P., 36 Bromfield St., Boston.
Ames, C. H., 7 Park St., Boston.
Bailey, Henry T., North Scituate.
Baker, O. M., care G. & C. M. & Co., Springfield.
Bancroft, M. H., Newton Upper Falls.
Barber, Sarah J., 31 Blossom St, Fitchburg.
Barnard, Geo. F., 36 Johnson St., Lynn.
Barnes, Louisa J., 773 Broadway, Boston.
Barnes, Thos. H., 773 Broadway, Boston.
Bartlett, Grace C., New Bedford.
Bartlett, Annie L., New Bedford.
Bartlett, Geo. H., Nor. Art Sch., 1645 Washington St., Boston.
Bemis, Edward W., 35 Morgan St., Springfield.
Berry, Miss C. E., Andover.
Bond, Mrs. D. W., Florence.
Bond, Mrs. Elizabeth P., Florence.
Bosworth, W. S., Westonborough.
Bowen, Miss G. A., 394 Main St., Charlestown.
Boydon, A. G., Normal School, Bridgewater.
Brackett, Lena, Melrose.
Brackett, Walter S., Melrose.
Bradley, Milton, Springfield.
Bradley, Mrs. M., Springfield.
Burnham, Hattie V., 13 Walnut St., Haverhill.
Butler, May E., Ipswich.
Carrington, Geo. Henry B., 32 Broomfield St., Boston.
Carter, Charles M., 616 Washington St., Boston.
Carter, Mrs. J. H., Malden.
Chase, Leverett M., 16 Woodville Sq., Boston.
Cherrington, Josephine B., Hawes School, So. Boston.
Clark, John L., 7 Park St., Boston.
Clark, Mrs. M. E., 240 W. Canton St., Boston.
Clark, Nellie E., 240 W. Canton St., Boston.
Clark, Cora A., 240 W. Canton St., Boston.
Clark, Jr., John A., 7 Park St, Boston.
Codworth, Miss A. M., 3 Wesley St., East Boston.
Cook, Nellie, Somerville.
Cross, Anson K., Art School, Boston.
Dana, Mrs. Major, 62 Brattle St., Cambridge.
David, J. B., Somerville.
David, Mrs. J. B., Somerville.
Davis, Olive A., 254 Washington St., Chelsea.
Dwelley, Mrs. A. J., Springfield.
Eaton, A. J., Plymouth.
Edwards, Edward H., 131 Tremont St., Boston.
Edwards, Mrs. E. H., 131 Tremont St., Boston.
Elder, Ella C., Florence.
Farrell, C. A., 836 Washington St., Boston.
Farrell, G. D., 836 Wash. St., Boston.
Fay, Miss L. E., 27 Wilcox St., Springfield.
Fellows, George S., 98 Chatham St., Worcester.
Fisher, Wm. G., West Dedham.
Fisher, Miss L. I., West Dedham.
Fruchte, Amelia C., care Dr. Harris, Concord.
Fuller, H. T., 18 Boynton St., Worcester.
Furbush, Miss M. J., 16 Baldwin St., Charlestown.
Gardner, Rebecca B., New Bedford.
Garland, Josephine, 21 Hollis St., Boston. ('84.)
Gibbons, Hannah, Melrose.
Ginn, E., 13 Tremont Pl., Boston.
Goodrich, Arthur L., Salem.
Goucher, Ida M., Southwick.
Graham, Richard W., Malden.
Graves, E. E., Florence.
Green, W. L., 195 Westford St., Lowell.
Hale, A. B., 209 Washington St., Boston.
Hamlin, Chas. E., Cambridge.
Harrington, Henry F., Supt. Schools, New Bedford.
Hartwell, E. Adams, 36 Chestnut St., Fitchburg.
Hastings, Geo. H., 28 Crescent St., Fitchburg.
Heath, D. C., Box 5164, Boston.
Heath, Mrs. D. C., Box 5164, Boston.
Heintzemann, Carl H., 50 School St., Boston.
Heintzemann, Mrs. Carl H., 50 School St., Boston.
Hicks, Mrs. Mary D., 62 Brattle St., Cambridge.
Holbrook, Amy, Melrose.
Holbrook, Florence, Melrose.
Kelley, Bernard, Milford.
Kelley, Mary J., Milford.
Kinney, Benj. W., 2 E. Shelby St., Worcester.
Kollock, Mrs. L. M., New Bedford.
Lampson, W. H., Lynn.
Lanman, Alice L., 153 W. Canton St., Boston.
Lee, Yang Phou, 30 Franklin St., Boston.
Lincoln, H. H., 247 Webster St., E. Boston.

Loker, Sara W., 23 Mt. Pleasant Ave., Roxbury.
Lovejoy, E. W., Boston.
Lovell, Abby M., West Boylston.
Marvin, Grace, Roxbury.
Mason, Luther W., 13 Tremont Pl., Boston.
Mayo, Rev. A. D., 3 Somerset St., Boston.
McQuarrie, J. A., Boston.
Meredith, Mrs. Eleanor, 7 Park St., Boston.
Miller, E. M., Springfield.
Morris, Geo. E., Waltham.
Morss, C. H., Middleboro.
Morton, Eunice J., Hatfield.
Morton, Mrs. D. P., Hatfield.
Mowry, Wm. A., 3 Somerset St., Boston.
Newman, Mrs. S. H., Beverly.
Orcutt, Hiram, 3 Somerset St., Boston.
Parker, Alice C., Lowell.
Parker, Evie M., Lowell.
Parker, Lina S., Lowell.
Patterson, Mrs. J. L., Roxbury.
Pennock, S. M., Somerville.
Pennock, Mrs. C. H., Somerville.
Philbrick, John D., Danvers.
Philbrick, Mrs. John D., Danvers.
Pierce, Mrs. A. G., New Bedford.
Pierce, Mary B., New Bedford.
Pierce, Louisa C., New Bedford.
Pierce, Sarah B., West Boylston.
Rogers, Thatcher, 36 Bromfield St., Boston.
Rugg, Chas. P., New Bedford.
Rugg, Mrs. Chas. P., New Bedford.
Rugg, Elizabeth S., New Bedford.
Sargent, E. L., 126 No. Ave., Cambridge.
Sargent, H. E., 126 No. Ave., Cambridge.
Sibley, Willard E., Waltham.
Simpson, Miss E. J., Newton.
Slafter, Carlos, Dedham.
Slafter, Mrs. Carlos, Dedham.
Smith, Fanny H., 2 Forrest Ave., Worcester.
Smith, Delia T., Riverside School, Auburndale.
Smith, Elbridge, Dorchester.
Squire, John A., Arlington.
Stickney, Edward, Chelsea.
Stone, Mrs. E. M., Springfield.
Stone, A. P., Supt. Schools, Springfield.
Swasey, O. F., Beverly.
Taber, Mrs. Wm. G., New Bedford.
Trask, Miss M. E., Training School, Haverhill.
Waite, Henry Randall, 30 Franklin St., Boston.
Washburn, K. N., Springfield.
Watson, E. J., Smith College, Northampton.
Webster, Ellen B., Institution for Blind, So. Boston.
Wenchell, S. R., 92 Franklin St., Boston.
West, Mabel, 120 Central St., Somerville.
White, Abbie M., Farnumsville.
Whittemore, Henry J., Hyde Park.
Wiley, Kate E., Peabody.
Winch, Geo., P. O. Box 1613, Fitchburg.
Wyllcomb, Eva A., Ipswich.

## MICHIGAN.

Ballou, James W., Otsego.
Cheaseboro, Elizabeth, 213 No. Lafayette St., Grand Rapids.
Davis, Hattie, Flint.
Edwards, W. F., Niles.
Ford, Miss C. E., 14 Plainfield Ave., Grand Rapids.
Kendall, F. M., Jackson.
Leavitt, W. F., Kalamazoo.
Payne, Prof. W. H., University, Ann Arbor.
Sill, J. M. B., Supt. Schools, Detroit.
Stewart, John A., Monroe.
Tibbals, Wm. H., Escanaba.
Wead, C. K., University, Ann Arbor.

## MINNESOTA.

Cole, James B., Minneiska.
Curtis, V. G., Stillwater.
Curtis, Mrs. V. G., Stillwater.
Dodge, Vienna, Winona.
Jenness, Mrs. Mary E., St. Paul.
King, Preston, 41 Island Ave., Minneapolis.
Shepard, Irwin, Normal School, Winona.
Sprague, Kate L., Winona.
Thombs, A. P., St. Cloud.

## MISSISSIPPI.

Burrus, Prof. J. D., Rodney, Jefferson Co.

## MISSOURI.

Batchelor, Sarah B., 2011 Lami St., St. Louis.
Blunt, M. Olive, 1310 Park Ave., Kansas City.
Chase, Jennie F., 4718 So. B'dway, St. Louis.
Christian, W. D., Paris.
Irwin, D.D., Robert, Pres. Linderwood College, St. Charles.
Long, E. H., Supt. Schools, Cor. 7th and Chestnut Sts., St. Louis.
Merwin, J. B., 704 Chestnut St., St. Louis.
Osborne, Geo. L., Normal School, Warrensburg.
Rollins, C. B., Columbia.
Shattuck, Kate E., 1814 Washington Ave., St. Louis.
Thomas, Wm. L., 505 Chestnut St., St. Louis.

## MONTANA TERRITORY.

Davis, Jehiel K., Butte.

## NEBRASKA.

Grant, H. L., State Nor. School, Peru.
Hubbard, Miss Z. S., Peru.
Jones, W. W. W., State Supt., Lincoln.
Steer, J. H., Santee Agency.
Winne, Martha, Peru.

## NEW HAMPSHIRE.

Burnham, Wm. H., Dunbarton.
Hazeltine, Mrs. M. E., Atkinson Depot.
Hazeltine, Mary A., Atkinson Depot.
Rounds, Iola, Plymouth.
Shirley, Mrs. E. C., Goffstown.
Wentworth, Geo. A., Exeter Academy, Exeter.

## NEW JERSEY.

Barringer, Wm. N., Supt. Schools, Newark.
Bottum, Mary L., Morristown.
Burritt, Ruth, Atlantic City.
Canniff, A., Bellville.
Clark, Joseph, 48 E. Kinney St., Newark.
Clark, Mrs. Joseph, 48 E. Kinney St., Newark.
Collard, Thomas T., 23 Court St., Newark.
Corliss, Alonzo B., Pluckamin.
Corliss, Mrs. Alonzo B., Pluckamin.
Crane, Rev. Oliver, Morristown.
Cusack, James, Jersey City.
Davey, V. L., East Orange.
Day, Stephen L., 215 So. 6th St., Newark.
Eckersley, W., Long Branch.
Eckersley, Mrs. W., Long Branch.
Giffin, Wm. M., Lawrence St. School, Newark.
Joslin, A. D., High School, Jersey City.
Kayser, C. F., 148 Washington St., Newark.
Kelley, Edward, Pub. Sch. No. 4, Jersey City.
Paddock, M. H., 99 Lindon Ave., Jersey City.
Putney, Mrs. H. F., Saltersville, Hudson Co.
Shepard, Edwin, 77 Court St., Newark.
Slattery, William J., Paterson.
Smith, J. Ward, 177 Quitman St., Newark.
Spaulding, Randall, Montclair.
Taylor, Geo. O. F., 69 Sherman Ave., Newark.
West, A. F., Princeton College, Princeton.

## NEW YORK.

Abell, Julia L., Schenevus, Otsego Co.
Abbot, Chas. R., 157 Gates Ave., Brooklyn.
Adams, L. A., 8 Courtland Ave., Syracuse.
Aldridge, Vincent, 122 Waverly Place, New York.
Allen, Jerome, 25 Clinton Place, New York.
Angel, Sarah L., East Virgil.
Ashmun, A. A., Box 329, East New York.
Ayers, Fannie B., Catskill.
Ayers, J. V. D., Catskill.
Bardeen, C. W., Syracuse.
Barhite, Jared, Saratoga Springs.
Barker, E. D., 19 Murray St., New York.
Barker, Chas. P., 385 Adelphi St., Brooklyn.
Barnes, Nellie A., 2 McDonald Ave., Binghamton.
Beale, Abby N., 203 West 11th St., New York.
Beale, Elizabeth N., 203 West 11th St., New York.
Beattie, David, Supt. Schools, Troy.
Bedford, Jennie E. B., New York Mills.
Belknap, Emmet, Unadilla.
Benedict, A. G., Clinton.
Bergen, Garret, P. O. Box 81, Brooklyn.
Bickmore, Albert S., Museum Nat. Hist., Central Park, 77th St. and 8th Ave., New York.
Bigelow, John B., Windsor, Broome Co.
Boothby, Asa, Fulton, Oswego Co.
Boothby, Frank L., Fulton, Oswego Co.
Borland, Mrs. Pauline, Oyster Bay, Queens Co.
Bouton, Eugene, 11 Park St., Albany.
Buckelew, Sarah F., 237 East 37th St., New York.
Bull, Nathaniel N., Oneonta.
Burdick, Prof. F. M., Clinton.
Bristol, E. N., 29 West 23d St., New York.
Brown, Charles W., 1 Bond St., New York.
Calkins, Ella, 124 East 80th St., New York.
Carman, Geo. N., Third Ave. and State St., Brooklyn.
Chilcott, Lulu M., 22 Irving Pl., Buffalo.
Clark, Noah T., Canandaigua.
Cobb, Emeline, Catskill.
Cole, J. W., 10 Liberty St., Troy.
Coley, Sarah E., 360 W. 19th St., New York.
Comings, Fannie S., 354 Ninth St., Brooklyn.
Cook, E. H., Normal School, Pottsdam.
Coomes, Miss J. E., Primary Sch. No. 40, New York.
Cooper, Arthur, 28 Bond St., New York.
Cooper, Matilda S., Nor. Sch., Oswego.
Cosgrove, Mrs. Mary, Clarkson St., Flatbush, Kings Co.
Cosgrove, Nellie, Clarkson St., Flatbush, Kings Co.
Cowles, A. W., 855 College Ave., Elmira.
Crafts, Rev. W. F., 106 E. 81st St., New York.
Crafts, Mrs. W. F., 106 E. 81st St., New York.
Crane, Marietta C., Medina.
Dannon, Mrs. S. H., Amsterdam.
Davenport, Mary, 232 Keap St., Brooklyn.
Davies, Miss C., 279 S. 4th St., Brooklyn.
Davies, Miss E., 279 S. 4th St., Brooklyn.
Davis, Flora F., 203 W. 11th St., New York.
Davis, Joseph B., 203 W. 11th St., New York.
Decker, Jacob H., Livingston.
De Wint, J. P., Astoria.
Dowd, Charles F., Saratoga Springs.
Dunning, Sarah L., Malone.
Ecker, Charlotte, 443 W. 18th St., New York.
Eggleston, Anna K., 45 Wadsworth St., Buffalo.
Ellis, S. A., Supt. Schools, 13 Clifton St., Rochester.
Evans, Barbara, 356 W. 15th St., New York.
Evans, Asher B., 500 Pine St., Lockport.
Farrington, Miss A. L., School No. 6, Yonkers.
Ferrall, Louisa, 236 So. 4th St., Brooklyn.
Follett, Ella, 84 S. Chapin St., Binghamton.
Fuller, Ella C., Tonawanda.
Fuller, E. R., New Berlin.
Gaffney, Emma, 8 Exchange Pl., Binghamton.
Greene, C. F., 650 Fulton St., Troy.
Griffith, George, Supt. Schools, Lockport.
Grimshaw, Mrs. J. V., Wappinger's Falls.
Hall, M. B., Liberty, Sullivan Co.
Hallenbeck, Oliver H., Livingston, Columbia Co.
Hamilton, E. J., Supt. Schools, Oswego.
Hanaway, Emily S., 55 W. 127th St., New York.
Horton, Fred. B., Livingston, Columbia Co.
Howard, Jr., H. S., Watkins.

Howe, Harriet F., 311 W. 17th St., New York.
Howe, Lucy, 311 W. 17th St., New York.
Hughes, M. Josephine, New York Mills.
Hunt, Hattie E., 127 Clifton Pl., Brooklyn.
Huson, Edith L., 536 Main St., Buffalo.
Hyde, Mary F., Whitney's Point.
Hyde, Fannie M., Whitney's Point.
Illsley, Hattie H., 232 Keap St., Brooklyn.
Jelliffe, W. H., 196 Sixth St., Brooklyn.
Jewell, W. Jerome, East Syracuse.
Jones, Edward N., Supt. Schools, Saratoga Springs.
Jones, William, 118 E. 80th St., New York.
Jones, Eveline, 118 E. 80th St., New York.
Jones, Herbert J., Walden, Orange Co.
Kelley, Charles C., Middle Hope, Orange Co.
Kellogg, Amos M., 25 Clinton Place, New York.
Kingsbury, Belle, Lockport.
Kingston, Emma J., 274 Summer St., Buffalo.
Kirk, Hyland C., Phelps.
Knight, Margaret L., Amsterdam.
Leach, Orlando, 743 Broadway, New York.
Leckendy, Alfred B., 1 Summer Park, Rochester.
Leipziger, H. M., 129 Crosby St., New York.
Lester, Ordelia A., Adelphi Academy, Brooklyn.
Lingg, Henry J., 66 Nassau St., New York.
Lomb, Henry, 48 Clinton St., Rochester.
Lord, M. E., Hancock.
Mansfield, S., Wappinger's Falls.
McLean, C. D., Normal School, Brockport.
McMillan, Andrew, Supt. Schools, City Library Building, Utica.
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# ADDRESSES AND PAPERS

OF THE

# NATIONAL EDUCATIONAL ASSOCIATION

AND ITS

# DEPARTMENTS.

1885.

# ADDRESS AND PAPERS OF THE GENERAL ASSOCIATION.

## *ADDRESS BY F. LOUIS SOLDAN,*

PRESIDENT OF THE NATIONAL EDUCATION ASSOCIATION.

Spinoza, in one of the propositions of his ethics, reminds us of the endless chain of finite causes to which every event or finite thing is linked. Whatever exists or lives has its immediate cause in some other finite event or thing. To trace this causal relation in the realm of living things, has been the intellectual work of the last three decades in particular fields of inquiry, as it had been the cherished problems of philosophers for ages in a more general way. The search for finite causes, the discovery and invention of kinship among living things, the tracing of the heterogeneous forms of to-day to primeval homogeneity, is the characteristic bent of modern science in almost every department. Through his doctrine of the survival of the fittest, Spencer seeks to account for the development of the whole life of the globe; he finds in it an explanation not only of the aspects of nature, of the existence of animal life, but also of the customs and laws of human society. Similarly, it was Darwin's task, and that of his followers, to find the finite causes, such as variation, heredity, "selection," and the like, which seem to account for the existence and structure of the animal and vegetable worlds, to trace the subtle steps of "formation, transformation, the eternal Mind's eternal recreation," and to explore the process whose vast results make the world teem with forms of life, varying in thousands of ways, and yet with striking resemblances. Long before these men of our day, Goethe had seen the existence of such a law, without being able to unfold it in its details. He says, in an "Ode on Metamorphosis of Plants," addressed to his friend:

> "Thou art confused, my beloved, at seeing the thousandfold union,
> Shown in this flowery troop over the garden dispersed....
> None resembleth another, yet all their forms have a likeness;
> Therefore a mystical law is by the chorus proclaimed...."

Kant and Laplace suggested, a century ago, the bold nebular hypothesis, by which the myriads of suns and stars that beautify the firmament are made to evolve from the primeval mist which filled the universe, and out of which, through gravitation and molecular forces, those shining orbs were formed and began to rotate through space. Thus when modern science has followed existence to its beginning, and cannot go beyond, it arrives at a first cause which it can resolve no further. There is infinite creative divine energy hovering over the void at the beginning of time. In the universe above us, as in the cell and crystal before us, in all the finite forms of existence there is ever-living primal energy as the creative, sustaining and regulative principle. To understand the problems of life means to view them in the light of eternity.

In the life of the human race the same law holds true. To understand them means to look upon them in the light of a universal, eternal principle which moves in them.

Life and progress are found not only in the organisms which bedeck the earth, but also in man's institutions. Here, too, a higher civilization is evolved out of lower forms. Through a process carried on continuously, but slowly and silently, the new everywhere takes the place of the old. In this perpetual flow of forms of life and culture, in the change from one stage to another, the rate of progress is not the same for all things. While society and the manifold relations of life change imperceptibly from day to day, and are in a constant course of upward development, there are human institutions which have become fixed, and do not partake of the changes which are going on in the other affairs of man. Forms of life, customs and laws, which when they originated answered closely to some want or need, are seized tenaciously by habit and tradition, and are preserved even after the special need which gave rise to them has passed away. Thus many of the superstitions of times long past still continue to survive under the form of popular customs. Many of the polite forms of social life today which seem graceful but useless, are the preserved observances of other ages when they were full of practical significance. They are now mere forms which have lost their meaning.

The same high vitality and tenacity which those ancient customs possess, which continue to have a formal existence after their substance has vanished, manifests itself in those institutions and laws which the human race creates to provide for the needs of the day. That which is customary, that which has become a race-habit or a tradition, frequently outlasts its creating necessity. The history of laws furnishes abundant evidence of such forms which continue to exist after their substance has passed away, and after society and life have developed beyond them and above them. Law, custom and tradition are stable, society and men are progressive.

If thus those factors of civilization which should be harmonious, in

order to supplement and support each other, are different in their rate of progression, or rather if life is progressive and institutions and customs stable, a discrepancy will make itself felt soon, and an adaptation of the dead, invariable forms to the variable, living principle becomes necessary. Traditions, laws, and institutions must be adjusted either gradually or radically at times to the changed demands to which they should conform. In law this fact has been recognized for a long time. The written statute becomes incapable of development, and when in the course of time changes in the views, habits, and in the state of society make the law inoperative, or hostile to the ethical principle of justice, the law is made to conform with the spirit of the times, if not in its wording, still in its application. "It may be laid down," says Maine,* "that social necessities and social opinion are always more or less in advance of law." . . . "We may come definitely near to the closing of the gap between them but it has a perpetual tendency to reopen. Law is stable, . . . societies . . . are progressive. The greater or less happiness of a people depends on the degree of promptitude with which the gulf is narrowed."

The historical life of mankind does not present a steady reproduction of identical forms, but it is a rising course of development by which higher types of life and civilization are evolved. The infinite energy living in finite things strives towards the production of more perfect forms of existence. The life of the race is therefore not simply perpetual, stereotype movement, but progression towards a higher plane.

While there is progression in all human things, the rate in which life and the various human institutions progress, is not uniform, and from this unequal rate of progress, a certain dissonance soon arises, which must constantly be reduced to harmony. While on the one hand, life and civilization grow naturally, according to their inherent, living principle, there are, on the other hand, the human customs, the laws of the State, the institutions which have been formulated in the shape of recorded or traditional rules and which are fixed and rigid in themselves. In these there is no principle of natural growth ; but human intelligence soon perceives the gap that is widening between ever progressive life and fixed institutions, between the infinite and universal principle on one side and the fixed law on the other, which mirrors but a transient and momentary phase of life, and which has served its purpose when it has answered the needs of a generation or an age.

Constant adjustment is therefore needed to make law and institutions harmonize with life and its needs.

In regard to the principle which should guide us in bringing about the required adjustments and in regard to the mode in which they are to be made,

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* *Ancient Laws*, p. 23.

the following truths suggest themselves. No matter by what special modifications these changing finite relations are adjusted, the general principle of adjustment remains the same; as the mariner sets the course of his vessel by the fixed suns above him, so lapsing laws are rectified by reference to an abiding and eternal principle, that of justice. A similar idea Spinoza must have had in mind when, in recognizing that truth cannot be changing and finite, but is necessarily abiding and infinite, he recommends to the thinking mind to judge of all things from the standpoint of eternity. Thus laws and their operations must be considered in the light of eternal justice, and their finite shortcomings which will manifest themselves periodically, from time to time must be set right in accordance with the idea of right. Nor do these principles apply to laws alone; whatever institutions or customs the human mind originates tend to become rigid. They exist then as fixed and unchanging practices while life, and the world's organism, progress and outgrow them. When forms once teeming with life become meaningless or narrow and threaten to stifle the growth of civilization, a readjustment must take place, the old forms must be widened or broken so that the spirit which moves in the affairs of this world has room to unfold its wings for a higher flight.

As to the method to be observed in making the changes in laws and institutions, which the principle of adjustment requires, human intelligence is guided by the mode in which life grows; it is a process of evolution, not of revolution. What has once been created is not cast aside, but forms basis and part of a more perfect type into which it is molded and transformed.

The law of the unequal rate of progress of the fixed forms and of the life of the social organism applies to education as well as to all the other institutions of society. The needs of the moment influence the thoughts and plans of those who direct education. Educational institutions are reared, and practice becomes formulated and fixed. School instruction, courses of study, and methods of teaching are made to suit life and its demands, according to the needs of the times. The life-work of teachers is devoted to the realization of these plans, and with them the educational practices by which the system is carried out becomes a habit; a fixed routine of school-keeping becomes the result to which the parents, the teacher and the pupils become alike accustomed. Such a system of instruction with all its details, after it has originated in one age, and has been so modeled as to answer its special needs, is apt to become fixed and rigid, while the fresh energy of the intellectual universe blooms forth in new blossoms, and while new aspects of social and economic life spring into existence. Since the features of the world change constantly, many educational practices which have been handed down to us from generations, soon cease to mirror the character and needs of suc-

ceeding epochs. All educational institutions are originally designed to meet the needs of the times, but they partake of the common fate of all human institutions: they become old and narrow. There is a gulf gradually widening between them and the new spirit that has come into the land. A process of readjustment and adaptation must therefore take place. The earlier the necessity of such adjustment is discovered, and the more readily it is made, the less there is of that tension and strain which must ensue where adjustment is delayed. This strain between educational institutions and methods that have survived their usefulness and the needs of the times manifests itself in the public sentiment by dissatisfaction and censure.

In order to bring about promptly those changes which progress demands, a speedy detection of the existing need of a change is essential; when this has been discovered, a better form should be devised, to supplant the old and obsolete. This new form may be found by an appeal to the eternal truth in whose light the new departure should be made. What is done for the day, the educational changes which the imperious moment requires, should be an adaptation to the great living principle in us, not a violation of it. For the moment grows old and soon is numbered with the past, but the eternal verities in education as in the other spiritual institutions of man are gifted with never-fading youth and freshness.

When systems of education have out-lived themselves with the epoch to which they belonged, when methods of instruction have grown old and no longer fit the life for which they are to prepare, when in the accustomed round of inherited manners and duties, the teacher's faithful zeal labors in the circles of the old and trodden path from which life has gradually moved away, then arises a voice out of the progressive living consciousness of the nation which proclaims anew those eternal and fundamental principles of education to which routine and method, school and studies must ever be adjusted. Such a call has gone forth in our days, and the name of New Education has been given to it. It is new, as I take it, not in the sense of being the novel invention of the moment, the practice of the day, but rather in the sense that it is a restatement of the great truths underlying all rational teaching which, like all other eternal verities, appear always new and fresh, while it is the fate of educational practice soon to become covered with the dust of routine. In that sense Montaigne and Commenius, Locke and Rousseau, Pestalozzi and Froebel were the teachers of New Education, and many of those whom I see before me have taught and practiced it in the sphere of their work through a life-time. Any movement which draws public attention to the cause of education, which enlists public sympathy and interest in educational efforts, and impresses the people with the fact that the cause of education is of vital importance to every interest of life, should be hailed with

pleasure. It matters little whether it is called old or new, if it animates the teacher, if it rouses a new wave of educational enthusiasm, if it encourages the study of the deepest thoughts of the great educational thinkers, if it leads to the adjustment of the educational practice of the day to the great educational truths of all ages, as well as to the legitimate demands of the hour, it will be hailed with delight by every teacher in this meeting. It will promote that adjustment of routine to principle which is constantly needed.

In this progressive adjustment of education the detection of existing differences between practice and principle is the first important step. In this difficult undertaking the teaching profession is liberally aided by the criticism which is launched against the schools in unstinted measure. The torrent of abuse, the profusion of advice which at times accompany it, are by no means unmitigated evils. They may at times invite reply, but they should always be allowed to claim attentive, and, in many instances, respectful study. Public criticism is the barometer which may not always indicate truly the educational weather, but if it were ignored or cast aside storms might overtake us unawares. It is a self-evident proposition that not all criticisms are just, and that not all critics are competent; often that which one censures, the other commends. By one the demand is made to shorten the time of school, and seems to meet with general approval; but when in another place the attempt is made to carry such a plan into practice, it meets a storm of popular indignation and must be abandoned.

One critic demands more thorough work in existing studies than has been possible with the number of studies taught, while another makes a most vigorous claim to embody additional studies in the course. It appears from these, as well as many other considerations, that the current criticism is not a safe guide as to the kind of change that is needed in schools and teaching. It is not sufficiently fixed and intelligent to regulate practical work by it. But while not a regulative principle, it deserves attention and study, because it assists in the discovery of those features in the school systems of the day which need readjustment. The true guiding principle for the reformer in working the gradual changes which the development of life demands are found in the first place in the eternal educational verities which have been set forth so eloquently by the great thinkers and writers in this field—truths which every educator can gather afresh every day from the study of the child's mind, and of which he may find an echo in his own convictions concerning the destiny of man and the nature of the soul.

A guiding principle for the changes to be wrought in education can be found, in the second place, in the study of society and the wonderful changes which have never been more rapid and more radical than in the

century towards whose close we hasten. And, above all, the best guide as to the *mode* in which those changes should be made is nature herself, who works through evolution, but not through revolution. The critic who shows us how to develop what there is into a higher, more rational and more adequate form, is very different from the one who counsels us to upset and destroy. This is true in politics, and is true in teaching. Herostratus attained historic fame in one night by burning down the glorious temple which a whole age of industry and skill had built up. But in our age a reputation cannot be made by denunciation of that which *is*, and by counsels of sweeping destruction. Education, like all the other great works of nature and institutions of man, cannot be promoted by revolution, but should be perfected by evolution, by faithfully building further what others have begun, by making restlessly and quietly the changes which adjustment to the conditions of life and the eternal laws of the soul require, and by viewing the particulars in the light of the universal. Evolution, not revolution, is the watch-word in education.

Gigantic is the work of adjustment and adaptation which remains to be accomplished, but great is also the work that has been quietly done. In the school-rooms throughout the land a new spirit moves. When the pursuits of nations were chiefly agricultural, when people lived scattered over the land which they cultivated, and the cities, the centers of population, were less numerous and less crowded, pupils of all grades, of all ages, had to be gathered in the same school, under one teacher's care. That was the time of the ungraded school, and the conditions which the latter had to meet prescribed the methods of teaching which were used. Where all grades and all kinds of subjects had to be taught by one teacher—where the most various grades were gathered in the same room, from the child battling with the primer, to the boy who studied Virgil—the printed page of the text-book supplied an excellent and indispensable means of instruction. Text-book instruction was the legitimate method of teaching in the ungraded school.

The conditions under which the ungraded school arose have changed; there is a greater concentration of population everywhere. New cities have arisen, and the old ones have had a period of immense growth. Large classes of children of the same age and advancement could now be brought together, so that the need of individual study in books of most diverse kind no longer existed. But in accordance with the law laid down at the beginning of this paper, it seemed as if a rule or method of teaching once fixed were to remain unchanged under changed condition. The graded school began with the methods of the past—with text-book instruction pure and simple. But gradually and steadily has the process of adjustment been going on, and text-book instruction is no longer found

in the typical common schools of the country, and it is no longer supported by the sentiment of the profession. Yet, the vast change in methods of teaching was not the result of a sudden revolution, but of gradual adjustment. The past period and its lessons are not lost, nor is the text-book thrown aside, but while it stands no longer in the teacher's place, it is and will ever be recognized as a most valuable aid in instruction. With the new method of teaching, a new spirit has entered the school-rooms. The eternal aim of education has been placed more clearly before us; schools should *train* the child and not merely instruct him. Strength of mind and character, development of eye and hand, and vigor of body, are to result from the training of the young, and must be ruling principles in regard to the kind, the amount, and the method of instruction which the schools should impart.

New demands on education arise constantly. The accumulation of knowledge in the mind of our race has been quickened wonderfully in this century. It has been brought about through the progress made in the natural sciences, in the industries, the impulse given to traveling through the improvement in the means of transportation, and by the rise and growth of popular government. The industrial and political relations in which individuals live have grown in complexity, and, since the individual life is to be woven into the variegated tissue of these relations, the demand arises that the child should be instructed in the knowledge appertaining to each. The importance of new data of knowledge, of new studies, is recognized, and it seems reasonable to embody them in the curriculum of the common schools. As a matter of course the irrepressible tendency arises to increase the number of facts and data to be taught, and, consequently, to make higher demands on the memory and time of the children. Add to this that the tests and examinations for admission to more advanced courses of instruction unfortunately incite and encourage a tendency toward the accumulation of the data of knowledge through memory. The pernicious effects flowing from this tendency are realized everywhere. In no country are they felt more keenly at present than in England, where, in addition to the causes just stated, school-teaching is further impelled in this direction by the fact that the distribution of school-money takes place in accordance with the results of examinations which test the knowledge which the pupils have memorized. It looks almost as if it were necessary to protect the education of the child from receiving injury through the instruction which he receives.

In trying to adjust education to these and many other urgent demands, we turn again with confidence to the eternal and abiding truths of education. An error which is but too often implied, if not expressed, in the discussions of educational questions, is the assumption that it is the task of the schools to do the whole of the educational work needed in the train-

ing for life; there are other educational factors. The school cannot do the educational work of the family, of the pulpit, of the library, of the shop or counting-house. If it attempted it, education would lose itself in instruction. But what it can do, is to supplement, facilitate and prepare the work of all other educational factors.

Quite aside from filling the whole round of education, the common school cannot even undertake to teach all the data of knowledge which may seem useful and desirable. The true educational interest here lies in limitation, and the problem is solved, as far as the common school is concerned, if it succeeds in impressing a comparatively small number of the knowable data, taking care to teach each in such a manner that it may stand as the type of all knowledge, and looking upon knowledge as the second, and upon education as its first and highest aim. In mastering the few data to which school-teaching is limited, the child must experience how all knowledge should be mastered, how not only memory, but every effort of sense and thought, every energy of mind and hand, will and feeling must go forth and conquer the knowledge which is yet external, and make it his own. In the devotion to intelligent work, in the renunciation of self in laboring diligently for a proposed good aim, in the subduing of all vagrant impulses lies the moral training of intellectual work. The work which looks for an end alien to itself, for a grade to be passed, for a mark to be gained, does not have this ethical significance. It is not the piece-work nor page-work that is thus rewarded.

Only to work in which the aim is full, intelligent possession of knowledge, its assimilation into power and thought, the words of a great writer apply:

"It has been written, 'an endless significance lies in work,' as a man perfects himself by writing. Foul jungles are cleared away, fair seed-fields arise instead, and stately cities; and withal the man himself first ceases to be a jungle and foul, unwholesome desert thereby. Consider how, even in the meanest sorts of Labor, the whole soul of a man is composed into a kind of real harmony the instant he sets himself to work! Doubt, Desire, Sorrow, Remorse, Indignation, and Despair itself. All these, like hell-dogs, lie beleaguering the soul of the poor day-worker as of every man, but as he bends himself with free valor against his task, all these are stilled. All these shrink murmuring afar off into their caves. The man is now a man. The blessed glow of Labor in him is a purifying fire wherein all poison is burned up, and of sour smoke itself is made there bright, blessed flame."

In attempting to outline the law which demands the constant adjustment of School Education and in trying to trace the line of development of elementary teaching, I have confined myself to what may be called school-room questions. I can but briefly touch upon the process of adjustment which education requires from the hand of the law-giver and statesman. In the crowded cities of the land where circumstances are such

that the best work of teaching may be done, there are children whom school influences never reach, who grow up to a life of poverty and lowest toil, and from whose ranks vice daily graduates its largest number. How can these elements be drawn into the ameliorating influence of intelligence? This a question which presents itself to every nation on the earth and which the statesman must grapple with.

There is another problem of quite different nature which concerns this nation in particular. In our new civilization the highest and freest form of government has been reached. It rests on an identity of interests. Each citizen is ruled by all others and he rules them; he is sovereign and subject at the same time. His welfare, his life, his property, depend on the vote of his political equals. It is, therefore, a question that concerns each of us that those that participate in the control of the State should possess the intelligence without which this right cannot be exercised properly. In this sense education is a national question.

Patiently have the Southern States toiled, and strained every effort to give to the race whom the nation has set free that education which the changed conditions demand. In this effort the South has met with the earnest sympathy of the whole land; it has been recognized by the highest political body of the country that in this great enterprise the nation should lend its helping hand. No meeting of the National Educational Association should pass without giving its thought and attention to this great problem. But on all these questions better and abler voices than mine will speak to you in the papers and discussions which are to be presented before this meeting.

In conclusion, allow me to thank you, my fellow-teachers, for the great honor of electing me to preside over your meetings this year. While my absence from Madison on the day of election deprived me of the opportunity of thanking you then, I have appreciated your kindness more than I can say. Within the narrow limits of my ability, I have spared no effort in the preparations for this meeting. May its proceedings be worthy of the great and sacred cause of Education.

# THE IDEAL SCHOOL-MASTER.

BY GEN. THOMAS J. MORGAN, PROVIDENCE, R. I.

CROWNING the Acropolis at Athens stand the ruins of what was once the most beautiful temple in the world. Faultless in its proportions, well-nigh perfect in the execution of its details, of the purest white marble, and adorned with sculpture of the most exquisite workmanship, it was the glory of Athens, the pride of Greece, and a wonder of the world. Even in its ruins, the Parthenon draws to itself with magnetic power the hearts of all lovers of the beautiful.

For centuries, in many countries, the human mind has wrought at an ideal of the beautiful in the form of a temple. At last, the ideal was reached; it has never been surpassed. The Parthenon did not indeed fully embody that ideal. The ideal never becomes real. The mind may seize it, but the hands never. As an ethereal vision it may be faultless, but as an embodied reality, wrought in gross materials by human workmanship, it will reveal many a flaw and defect. Nevertheless as an ideal, what power it had over men's minds! What resources, what skill, what energy, what sacrifice, what patient waiting did it evoke, until at last men saw, admired, and loved it as "a thing of beauty, and a joy forever." What *sovereignty* that ideal has had over men's minds! In every age and in every country, artists have borrowed from the Parthenon, and have attempted countless times, in whole or in part, to reproduce this matchless building. Even those who have bent their energies to develop a style of architecture wholly different—Byzantine, Roman or Gothic—have felt the strange spell of this ideal urging them to their utmost endeavor, that what they produced should be as perfect of its kind as that ideal of the Greek temple, which lent such grace and beauty to the shrine of the virgin goddess.

It is ever thus with ideals. Seemingly baseless as the fabric of a vision, they are the most indestructible of human creations. An ideal once formed never perishes from the earth. It belongs to the empire of truth, whose subjects are immortal.

It may not be unprofitable for us to-day to consider for a little while—even though the picture to be drawn only in outline, and that by an unpracticed and unskillful hand—the ideal of a school-master.

We are the representatives of three hundred thousand American school-masters, in whose hands are placed very largely the destinies of ten mill-

ions of school children. What manner of teachers should we be? What is our aim? Toward what are we striving?

It is perhaps needless to say that the term school-master is used as including all of those who devote themselves to teaching. It is not restricted to any one class, or grade, or sex. In this day, when so many teachers are women, any discussion of teaching which did not apply to them and their noble work would be fatally defective.

It may also be well to add that the effort in this paper is to present the spirit of teaching, the *tout ensemble* of pedagogical virtues, rather than to sketch the portrait of any single individual. Should any of us measure ourselves by a perfect standard, we might well be abashed, but when we look upon our associates, and realize that we are members of a great and noble brotherhood of earnest and true workers, who, taken together, represent all that can be claimed for the teacher, we may well "take courage," and strive, each in his own sphere, and according to the measure of his ability and of his opportunities, to share in this ideal spirit, and to contribute something to the sum total of teaching power.

No artist, however humble, if he did but have the spirit of the artist, ever stood in the presence of the Parthenon, without feeling his soul quickened, and his aspirations ennobled. Even a picture of the temple in ruins stirs men's souls. If the sketch of the ideal school-master, which I now hold before you, is true to nature, it may be helpful to some at least, and harmful to none.

What now is our ideal of the teacher?

The ideal school-master is a *manly man*, one who has lofty conceptions of human life and duty, generous sympathies, keen discernment of life's realities, and who fully appreciates life's responsibilities and privileges.

Conscious of ability of a high order, of refined tastes, of large possibilities of achievement and enjoyment, he will find in his work of teaching ample scope for all his powers and attainments. As one who is to shape human destinies, and mould human lives quite as much by what he is as by what he does, he is guided in all his actions by manly principles. Keen and accurate in his observation of facts, deliberate in his conclusions, wise in his enactments, judicial in his decisions, just in his administration, inflexible in his adherence to right, consistent in all things, full of kindliness and helpfulness in discipline, patient with dullness and tender of the weak and unfortunate, always making new acquisitions for himself, and not only earnestly interested in the welfare of each member of his little kingdom, but an active, intelligent, useful member of the community in which he resides, he is a man to be admired for his true manliness. Teaching has its boundaries, and imposes restrictions a little irksome at times, but this is true of every human calling. It is incident

to life. The soul of man, because it is a soul, feels deeply the limitations of matter. This is prophetic of a realm of pure spirit. But the ideal school-master finds in his field of labor fullest opportunity for the exercise of the greatest and noblest qualities of manhood. He has entered a profession where the possibilities of labor are boundless, where new fields of thought and knowledge are ever presenting themselves, where there are opportunities of seeing reproduced in other lives all that is noblest and best in his own.

Teaching is a profession so honorable that it confers dignity upon all who enter it worthily, and borrows dignity from none. No man ever yet was so great that he might not have found in teaching exigencies for which his greatness would not suffice.

The ideal school-master blends in himself such elements of body and mind and heart, that all, not only those who from their inferior position may even look up to him as a superior being, but all who have relations with him, whether personal or official, business, social, or professional, will unite in saying—this is a man. Not a transcendental being, in the world but not of it, but a man of the people, a veritable product of his age, a typical representative of the best results of the civilization of his time. Dwarfed he may be by his environment, but he is all the more truly manly by this. The superhuman only can rise above human infirmities. Even Jesus, that he might become the great teacher of our race, emptied himself and became a man.

The ideal school-master is not a recluse, not a pillar saint, not a hermit, not a morose man, nor one solemnly weighed down by either a sense of his own dignity or of the grave responsibilities of his office—but a man living among men, practical, full of common sense, tact and worldly wisdom. He is all the better for a little rough experience in "boarding round," that he may see himself as others see him, and—others as they are. A man of energy, force of character, of good business habits, promptness, decision, regularity, and fidelity, having a just regard for himself, his good name, his personal habits and appearance, respectful of the rights of others, considerate of their feelings, polite in manner, gentle in speech, he is positive without rudeness, independent without asperity, refined without being a dude, and elegant without losing his simplicity.

The highest type of manliness does not exclude a keen relish for humor. The young are full of frolic and play, they like a joke, enjoy a laugh, and are won by a smile. Sunshine is more effective in germinating plants, developing flowers, and maturing fruit, than darkness. Potato vines *do*, to be sure, grow in a cellar, but they are pale and sickly. Frost has its uses, and doubtless the world has need of icebergs, or the North would not produce them so abundantly. But we should have a dreary climate were it not for the south wind and the Gulf Stream.

The ideal school-master *is a philanthropist,* one who loves man as man, one who recognizes the inherent dignity of the human soul, one who grasps the basal unity of all, of whatever race, condition, or sex, who accepts practically the one supreme fact that every being who bears God's image has in germ the possibilities of all human excellence and attainments, and is entitled to the fullest development possible of all his powers. That which marred the noble ideal of education formulated by Plato and Aristotle was the fact that it was limited to the few, while the many were debarred from participating in its advantages. The ideal school-master asks for talent, or rather teachableness, wherever it may be found. He finds it among slaves as among freeborn, in the hovel as in the palace, among the outcasts of society even as among the rich, the titled, and the proud. To be well-born is indeed a boon, but who can be better born than he who has God for a father? No pessimist bemoaning the remediless degradation of the race, no dyspeptic deeming all men fools but himself, no aristocrat wondering what common people could ever have been made for, no educational dude prating of culture of which the masses are incapable—none of these can be an ideal school-master. Only he who has an unconquerable faith in human nature, in the pedagogic salvability of the race, who has an enthusiasm for young people, and an ardent zeal for the unfortunate, the lowly, the poor, and the ignorant, who with a beneficence well-nigh divine would scatter the blessings of learning freely among all classes—including negroes, Indians, Chinese—typifies the spirit of the age as embodied in the ideal school-master.

His broad philanthropy, which embraces in its generous scope every individual of the race, kindles to a white heat in the school-room, and, losing its generic character, takes the form of an intense personal interest in the welfare and progress of every child committed to his care. He stands heartily as well as officially *in loco parentis.*

It goes without saying that the ideal school-master *is a patriot.* As a student of history he recognizes the almost omnipotent power of the State over human destiny. It is true, in a sense, that the State, with its constitution, its statutes, its institutions, is the creation of the people, the organized expression of their life—and yet it is likewise true that the State in turn affects most powerfully the life of the people. The influence of the State pervades every city, village, hamlet, farm-house, workshop, and fireside, like an atmosphere. If that atmosphere is malarious, the health of every citizen suffers. The black code legalizing and protecting human slavery acted like a rank poison, threatening to destroy our national life. Fortunately an overdose brought on a crisis, with an upheaving that left the body politic weak, but purged and convalescent. The iniquitous legislation that discriminates against the Chinese, though of a milder form, is no less marked as a poison that is doing its deadly

work. On the other hand, the Emancipation Proclamation, the laws against polygamy, the enactments in favor of educating the Indian and of lifting the mass of colored citizens to a higher plane of civilization, act as tonics, or, rather, they are food, and give health and strength to the people. The ideal school-master, loving his country as the land that gave him birth, and as the cherishing mother whose kindly offices have attended him from his earliest years, in whose history he takes pride, and in whose future his hopes are centered, seeks by all proper means to promote her weal. He recognizes his obligations as a citizen, and gladly shares with others whatever of civic burdens the exigency of the times may impose. He is not at liberty to wrap the silken folds of his scholar's gown about him, refuse to "mix in politics," and thus give over the government, with all its sacred interests, into the hands of those who make politics a trade, who gamble in public offices, barter their souls for official plunder, and who, left to themselves, would bring upon the republic the ruin that inevitably awaits us when good men and true no longer feel a personal responsibility, not alone for their vote, but for the full, intelligent, conscientious discharge of every civic duty.

Looking over his little flock of pupils, his penetrating eye sees beyond the present, into the not distant future, when these boys and girls are to be the men and women, the fathers and mothers, to whose hands the destinies of the republic are to be intrusted.

In some of his day-dreams there comes to him a panoramic vision. He sees before him a king seated upon a throne, swaying a righteous scepter over a vast realm and mighty people. He is clothed in purple, wears a crown glittering with gems, and holds a golden scepter, at whose motions wars are waged, peace maintained, and laws enforced.

The scene changes. Before him rises a judgment hall; men of reverend years, and countenances full of that majesty that is born of wisdom, experience and high endeavor, and clothed in ermine, typical of their purity of intention, sit to try great causes, involving the property, reputation and life of the citizen, and the maintenance of law and equity in the land.

Again the scene shifts. A vast palace of marble stands before him, its lofty dome a thing of beauty and magnificence. Within are men gathered from all sections of the republic to make her laws and maintain her institutions. Again he looks, and now there comes a scene more impressive than any that has yet gone before. On a November day, quietly as though it were an ordinary matter, but yet gravely, as if appreciating something of the deep significance of the act, he sees ten million free men depositing in their appointed places the single ballots that make and unmake senators, judges and presidents, revolutionize society and reconstruct constitutions.

Who are these potentates? these mighty ones of the earth? He dreams no longer; the vision is a reality. These little urchins that look up so innocently, so helplessly, so docilely into his face are the future sovereigns, judges, legislators, voters, who now look to him for that knowledge, training, inspiration, that shall enable them to in some degree fulfill the august duties that must devolve upon them as their birthright in this land of liberty. Can the ideal school-master be less than a patriot, who will seek by all the means within his power to so administer the affairs of his little republic that it shall embody and show forth in miniature all those exalted virtues which on the broader plane of public action dignify human nature, enrich the national life, and give perpetuity to the nation? He knows—

> "That the riches of the commonwealth
> Are free, strong minds, and hearts of health,
> And more to her than gold or grain
> The cunning hand and cultured brain."

The ideal school-master is *a scholar*—a man who knows. He is not necessarily a walking encyclopædia, although he must be somewhat encyclopædic in his knowledge. Of course he must know facts. He is not a Gradgrind attempting to measure the universe with a foot-rule, and refusing to admit that anything has value unless it can be estimated in dollars and cents. Nevertheless facts, things done, tangible realities, actual verities lie at the basis of scholarship. They are the foundation of all reasoning. There can be no science without them. There can be no intelligence without them. The universe is a vast congeries of facts, with some of which the scholar is to become acquainted. The teacher's knowledge of facts must be in a large degree immediate, he must grasp them in the concrete. They must be a part of his experience. At least typical phenomena, physical, metaphysical, historical, must pass under his own personal observation, and thus afford him a key to book lore. Books are to him simply the record of other men's observation and reflection, and differ from his own chiefly in being more extended. His acquaintance with facts will be accurate, not necessarily exhaustive, but so far as he forms a mental picture of phenomena, it will conform strictly with the reality. He knows facts in their relations; his knowledge is scientific. There are no isolated phenomena; all things are related to all things. This universe is an expression of thought, the embodiment of ideas. It is a cosmos. Order reigns everywhere. Science is but the partial revelation of the nexus that binds the facts—often widely separated in time, space and surroundings—into an harmonious whole.

The ideal school-master, while guiding his pupils in their search after facts, leads them to a comprehension of their deep significance, and in-

structs them in the arranging and classifying of the phenomena according to their logical relations. The true student of nature is he who studiously and reverently thinks over again the thoughts of the Creator. The ideal school-master's knowledge is catholic; it is not circumscribed by any narrow boundaries. "No pent-up Utica" is his. All knowledge is related, no science stands alone, nor is any one science supreme. The sciences of theology, jurisprudence, politics, language, mathematics, biology, physics, chemistry, history, etc., etc., are correlated. They are mutually dependent, and mutually interpretive. The man who knows but one thing is ignorant of that; the master of only one science is but a tyro in learning. Besides all sciences are the product of the human intellect, the spontaneous creations of human thought in its painful but triumphant march toward the conquest of the secret of the universe. They are in their entirety the fruits of human culture, and they are in turn the necessary instruments for the training of the human mind.

As a ripe scholar the ideal school-master stands as an interpreter of the past. His is the key that unlocks the vaults where all her treasures are guarded. Whatever of truth has been spoken by the great and good of old, whether in philosophy, science or literature, is his, and finds in him a friend and conservator.

The ideal school-master *is a philosopher*, a lover of wisdom, a man who seeks truth for truth's sake. Not content with accumulating, arranging, labeling and classifying facts, nor even with the established conclusions of science, he pushes his inquiries into the realm of the unformulated. While his chief business is to sail by the chart and to instruct his pupils in the well-established code of navigation, he does not hesitate to turn now and then into unexplored regions, and to cast his plummet into depths as yet unfathomed. Search after truth is its own reward, and, even though unsuccessful, lends a new value to treasures already gathered.

But pedagogy itself offers a wide and inviting field for the thinker. The final word in the philosophy of education has not yet been spoken. Teaching as a science has never yet been fully unfolded. The question has even been raised, whether there *be* a science of teaching. Certain it is that there are many pedagogical empirics; that traditional methods of teaching are largely in the ascendancy; that much of our so-called education is not only one-sided and defective but positively unphilosophical, not to say irrational and injurious; that among the advocates of the new education there is lack of agreement even on fundamentals, much more on questions of details. We might go farther and acknowledge that some of those who are reputed to be masters of the philosophy of teaching are deficient in skill in applying rational methods to the perplexing problems in the daily routine of school teaching. Shall we then give up in despair and say that there is no science of teaching? That pedagogy is a dream,

and the zealous educational reformers only dreamers ? This would be to charge folly upon some of the greatest minds of the past. For Plato and Aristotle, Quintilian, Comenius, Locke, Milton, Rousseau and others who have philosophized on this great theme have been recognized as able thinkers, and though they may not have formulated a science that will satisfy this critical age, they have unfolded great principles, and pointed the way to a true philosophy of education. Plato laid the foundations of this philosophy in his definition of a good education as that which "gives to the body and to the soul all the beauty and perfection of which they are capable."

Aristotle anticipated Froebel, when he advised that even the games of little children not yet old enough for school should be a preparation for the serious work of later years.

There is now a great body of educational doctrine accessible to every earnest student of pedagogy, invaluable to every intelligent teacher, and absolutely indispensable to him who aspires after the highest excellence in the noble work of forming and informing the human soul. The ideal school-master is a student of pedagogy, makes himself acquainted with the labors of those who have sought to give a reason for everything done in education, and to find a rational method for reaching every desired result.

He is not an imitator, but endeavors to acquaint himself with the nature of the complex being whose destiny is so largely committed to his keeping, labors long to form for himself a true ideal of education in its broadest acceptation, and having carefully considered the educational value of the different knowledges, he is not satisfied until he has worked out for himself a method which, while conforming to the laws of mind and the logical relations of science, will give free play to the individuality of the pupil, and the personal idiosyncrasies of the teacher. He is a philosopher, but philosophizes in order that he may be the better workman. The goal of his endeavor is action, the fruit of all his toil is higher results in the formation of character. His philosophy reappears not so much in books as in lives. He seeks to form, not a school of philosophy, but a school of philosophers.

Standing on the high vantage ground of philosophy, looking at life and its problems through a transparent atmosphere, he beholds what escapes the vision of less fortunate men. He is a veritable seer. He points out defects in reigning ideals, faults of execution in their embodiment, suggesting true ideals and better methods, and thus ushers in a nobler future. Like some Alpine peak whose snow-clad summit glows with the first rays of the dawn, and heralds the day while the valleys are still enveloped in darkness, the ideal school-master catches the glow of the coming millennium, and calls to action and to rejoicing.

As an educator one of his chief functions is to train his pupils to think. "I imagine," said Bishop Berkeley, "that thinking is the chief desideratum of the present age." "The indisposition, nay, the angry aversion to think," says Coleridge, "is the fact that forces itself on my notice afresh every time I enter the society of persons in the higher ranks." Carlyle declares "that a thinking man is the worst enemy the Prince of Darkness can have." Dr. Channing affirms that "thought is the fundamental distinction of mind, and the great work of life." Sir Joshua Reynolds paid this high compliment to one of England's greatest men: "Whatever merit my discourses have," he said, "must be imputed in a great measure to the education which I may be said to have had under Dr. Johnson. I do not mean to say that he contributed a single sentiment to them, but he qualified my mind to think justly. No man had, like him, the faculty of teaching inferior minds the art of thinking." Locke says: "It is thinking that makes what we read ours."

The power to think, to observe, analyze, compare, judge, abstract, generalize, classify, infer, and carry on complicated processes of inductive, deductive, or analogical reasoning, such as is required of men in even the humbler walks of life, if they would enjoy prosperity, health and happiness, is dependent largely upon the habits that are formed in the school-room under the guidance of the school-master. If he be not a thinker, how shall he train others to think?

The ideal school-master *is an artist.* The materials upon which he works are the bodies and the souls of living human beings; the ideal toward which he strives is their full development; his tools are the truths of science; the principles that guide him are the laws of rational life; the special methods that he follows are conditioned upon the especial end in view, the peculiar laws of the faculty or power to be dealt with, and the nature of the specific truth used as an instrument. To succeed, he must possess the keenest appreciation of the beautiful, since nothing in the created universe is more beautiful than the human soul; he must have the cleanest conception of the completed work in all its extent, proportions and details, for nothing is so complex as the human organism; he needs the nicest discrimination between the true and the false, the good and the bad, the beautiful and the deformed, since nowhere else is one more liable to err than in the training of the immortal mind, and nowhere else is error more fatal. He requires the most consummate skill, because the material in which he works is so delicate, the effects of his labor so lasting and far reaching in their consequences, and mistakes so remediless. The sculptor may cast aside a ruined statue, and choosing another block of marble, begin his work anew. But the teacher's blunders are wounds that never heal, scars that are never effaced. The painter may erase his work, change its form, color, tone, expression, or throw away his disfigured can-

vas and begin *de novo*. Not so with him whose canvas is the human soul. Every stroke is ineffaceable; the false coloring is there for eternity.

The architect is not limited as to time ; he may build to-day, and suspend his work to-morrow. Six centuries elapsed after the foundations were laid at Cologne, before the final touch was given to that wondrous Cathedral. But the artist who seeks the unfolding of the human soul, must studiously observe the set times for his work. An opportunity passed never returns. The work of to-day must be done to-day. His work is ruled by the imperative *now*. Work of to-day omitted is not only irreparably lost, but it renders the full work of to-morrow impossible. A stone misplaced to-day, is misplaced forever, marring the symmetry, and endangering the safety of all the structure to be built upon it. The musician striking a false note, simply produces a discord that is forgotten or unnoticed in the great volume of harmony. The teacher striking a false note mars the instrument, and the marring is irreparable.

Teaching is an art that requires skill, a skill that comes by practice, and as the result of long experience. But it is the skill of an artist, not of an artisan, that is required. Teaching is one of the fine arts, rather it is *the* finest of arts. No other is comparable with it. All other arts deal with lifeless matter. Teaching has to do with the living soul. All other arts are perishable ; this is for eternity. With the mechanical arts skill is the highest proficiency, and automatic precision is attainable. The man reaches his perfection when he does the work of a machine, and machines are continually displacing men. But in teaching, the skill needed is the cunning of the mind, and not of the hand. It is the delicate poise of the judgment, the keen intuition into motive, the remorselessness of reasoning, the inflexibleness of will, the directness of aim, the turn of a sentence, the flash of an eye, the detection of falsehood, and the uncovering of error, the judicious blending of praise and blame, the wisdom of help withheld and of aid proffered, the quick discernment of evil tendencies, and tact in developing any latent power of that wonderful piece of mechanism, the human body, as well as of perception, memory, imagination, thought and feeling, ability to arouse energy, kindle enthusiasm, restrain passion, regulate desire, direct conscience and enthrone reason, this is the skill required of *this* artist, the ideal school-master.

There are now and then in the world's history gifted souls who, like Leonardo and Michael Angelo, combine the genius of architect, painter, and sculptor. But it rarely happens that men excel in more than one line of artistic work. To the school-master is reserved the high distinction of manifoldness in artistic results. Under his skillful training there awaken to consciousness souls of the most various endowments—one to achieve distinction as an orator, another as a leader of armies, another as a great thinker, a poet, or a sculptor, still another as an explorer, opening up new

continents, or an inventor turning to new uses the forces of nature. His is the rare prerogative of recognizing the existence of these possibilities, calling into action these slumbering powers, and guiding to glorious results these god-like energies.

He is not so much a scholastic artist, however, as an artistic school-master. His love of order, system, beauty, manifests itself in everything about him ; in the attractiveness of the school grounds, the arrangement of his programme, the movements of classes, and in the consummate skill with which government—quiet, unostentatious, effective—is maintained. To him school discipline is *not* an ideal to be worshiped, but a servant whose aid is most valued when least obtrusive. It is an instrument to be kept bright, sharp, and ready for use when needed, but out of sight when not called for.

And, finally, the ideal school-master *is a Christian*, not a sectary nor a bigot, but a man who, without cant or hypocrisy, reverences God and recognizes in Jesus Christ the ruler of the universe. That wonderful being whom we call man has a religious nature as well as a body and a mind. If it is true, as Plato has said, that a good education is the full development of man in his entirety, then it must include the unfolding of that which is the crowning excellency of man's nature—his religious susceptibilities. That education which secures to him merely the training of his body, makes him only a magnificent beast. That which affords him an *intellectual* training alone may make of him a Mephistopheles, a sort of human devil, acute, cunning, capable, but unprincipled and full of all subtlety. That training which would secure to him the health of body, vigor of mind, and discipline of his moral powers, would fit him for citizenship, but if it left him untaught religiously, it would make of him only a cultivated heathen. Man is not a congeries of disconnected natures. He is a unit. Education pertains to him in his entirety. A complete education is a symmetrical education. Man without a religious training is like a kingdom without a king, an army without a general. He may be admirable for what he suggests—a splendid torso, but nothing more.

It is impossible for man to attain to complete manhood without the unfolding of each and all his powers. Not only is the higher conditioned upon the lower, but the lower nature depends upon the higher for its full significance.

The ideal school-master is not necessarily a preacher, and he does not push his religious tenets to the forefront, much less is he an offensive propagandist of any narrow creed. But he is a man whose entire being is adjusted to its environment. As a member of society he is in sympathetic relationship with his fellows. As a creature of the earth he understands nature's laws, loves her ways, and yields obedience to her requirements. As a self-conscious being he is at peace with himself ; and as a spiritual

being, he is at one with his Maker and Judge. What he is himself, sincere, honest, truthful, devout, he—more by example than by word, rather by the alchemy of godly living than by means of formal instruction—strives to render his pupils.

Man may be likened to the magnificent cathedral at Milan. His physical nature is the deep-laid and massive foundation; his intellectual nature the strong walls with buttresses, towers, and vaulted roof; his æsthetic nature supplies the statues, the noble windows, and the golden treasures in the sacristy; his moral nature may typify the great organs, the choirs and the vestments; while his religious susceptibilities find their counterpart in the voice of prayer and songs of praise, which, rising from ten thousand lips, mingling with the joyous strains of the organ, rise and swell until filling all the vaulted arches of the mighty pile, float away heavenward to the ear of Him for whose worship this beautiful temple was built.

Man without religion is a temple without worship. An irreligious teacher is one who constructs a cathedral without thought or care as to what use shall be made of it.

The ideal school-master, then, is one who rejoices in the highest prerogatives of manhood, strength of body and greatness of soul; a philanthropist who thinks nothing foreign to himself that pertains to man; a patriot who feels a personal responsibility in promoting the weal of the republic; a scholar reverencing the past and sifting from its history all that is true and beautiful and good; a thinker grappling independently with life's problems, pinning his faith to no man's sleeve, but forming for himself and others credal statements; an artist who, knowing the difficulty and delicacy of his self-appointed task, bends every energy to attain requisite skill, so that the trained hand and the educated eye may work in unison for the accomplishment of its high endeavor; a devout man, who seeks as the reward of his life, not fame, riches or power, but the consciousness of duty done toward his pupils, his country, his race, and his God.

## THE PUBLIC SCHOOLS AND MORALITY.

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By the phrase "Moral Education," we seek to designate the sum of influences which contribute to the formation of character. The phrase is not altogether a happy one; for as Bacon tells us, "language is a Tartar's bow, which doth shoot back upon the understanding of him that useth it, and mightily confounds him." This phrase suggests a discipline special and apart from that by which the intellect is developed; but we should miss what is most vital in our subject by suffering our thought of it to be thus limited. It is the moral aspect of school training which requires study and discussion at our hands, and not alone or chiefly the modicum of ethical precept inculcated in special lessons. Moral education is all-pervasive. The good Père Girard, in his enthusiasm over arithmetic as a means of moral culture, is right in principle although wrong in method. According to him when the Curé visits the school, the arithmetic lesson will proceed as follows: "What does the number 7 remind you of? Of the 7 deadly sins, the 7 sacraments, and the 7 golden candlesticks. What have you to tell me of the number 12? It is the number of the Apostles, the number of the minor prophets, and of the gates of the Apocalyptic Jerusalem." At this point the teacher remarks, "We have thus shown to our worthy pastor that we establish true relations between the art of computing and the principles of virtue and religion. Who will say after this that arithmetic is not a moral and edifying study?" The good father sought the moral and edifying results after the manner of his age. We, after the manner of ours, are learning to recognize them in the training to industry, to self-control, to accuracy, to truthfulness, to self-dependence, and to honor, which arithmetic affords in a well conducted school.

From a pedagogical stand-point we say that no teaching of children is good which has not an ethical purpose in it all, because the ethical result of it follows inevitably, and is the result of highest importance. It is an educational commonplace that what habits are formed is of more concern than what knowledge is learned, but we err if, in repeating this we confine our thought to making the pupils more intelligent. We shall not thus succeed best even in this purpose. It is necessary to rise higher, and recognize that the true aim is to make more of a man of him, to get hold of his moral and emotional nature, and lift him into a higher plane of

living by kindling in him a genuine interest in the things of the understanding. Those who do not either intuitively or rationally recognize this truth fail in great measure even of the lower end they seek; in accordance with that great law of ethics, "whereby the abandonment of a lower end in obedience to a higher aim is made the very condition of securing the lower one."

Hence we say that early education ought to be directed primarily to the formation of character, not in an occasional lesson but in all its parts and processes. We have daily proof of this in the school-room. When methods are devised solely with reference to imparting certain information, they are shortly found to be shallow and trivial; when with reference only to cultivating the intellect, they prove to be dry, or superficial, or fail to call out the energies of the pupil; they are good only when their aim is to touch the springs of life in the child, and bring him into thorough sympathy with the work. Thus the lower end is most readily attained by persistently abandoning it for a higher aim.

Not only educational theory, but also practical statesmanship recognizes this all-pervading moral purpose as the great duty of the common schools. It lies in the very fundamental argument for their maintenance. Talleyrand's expression of this has long been accepted as the most satisfactory. "The chief object of the state," he says, "is to teach its children to become one day its citizens. It initiates them, in a manner, into the social order, by showing them the laws by which it is governed, and giving them the first of their means of existence. Is it not just, then, that all should learn gratuitously what ought to be regarded as the necessary conditions of the association of which they are to become members?" Here are the elements in their right order: first, the moral purpose, to fit for citizenship, for social order; and second, the means, by teaching them the laws of this order. This is intellectual education infused with a moral purpose. The end of the intellectual training is thus seen to be that with them "reason and the will of God may prevail."

It is important, in passing, to remark that this morality is secular. The inference that it is therefore opposed to any of the forms of religion is entirely unwarranted; on the contrary, it is supported and strengthened by religious motives wherever these can be called in to its aid. But it rests firmly and unassailably in human experience, which has demonstrated its wisdom and necessity. It is taught because it is the foundation of social order, and approves itself to all right-minded men. Its cogency is increased rather than weakened by a distinct recognition of its secular character; for none but a fool will avowedly set at naught experience, and array himself against the order of the universe. Indeed, by recognizing its secular sanctions, we are ushered, as it were, immediately into the presence of "that power not ourselves which makes for right-

eousness;" and so we become truly religious. The great formative influence of our schools becomes apparent when we thus direct attention to the moral aspect of their whole work, instead of limiting our thought, as many do, to the direct and formal teaching in them of ethical precept. A practical discussion of the topic will, therefore, start with the inquiry, Can anything be done to make this work more effective?

Before attempting to answer this, we must take note of its necessary limitations, which must constantly be kept in mind. A German visitor to the public closing exercises of the City of London School, after witnessing the presentation of between four and five hundred prizes to the pupils, asked with amazement: "Is this the way you teach that England expects every man to do his duty?" Compared with the forces of tradition and public sentiment, which inculcate this maxim for every Englishman, a false practice in the schools is a trifling matter. False teaching on this point would be met by an outbreak of popular denunciation—so much worse, after all, is a bad principle than a bad fact. All the training of the schools is done under a like limitation; when supported by tradition and strong public sentiment, it is effective; when left to itself, or opposed by social tendencies, its results are far more uncertain.

Now in answer to the question, we say: the distinct and general recognition of the fact that the formation of right character is the principal aim of the schools, will contribute something to their efficiency in this respect. Good government is often spoken of by those interested in education as if it were an end in itself; and yet there are schools out of which all life, naturalness, spontaneity and enthusiasm are crushed by government called good because it secures a machine-like order. In them government has become an end instead of a means. In other schools the intellectual training so absorbs attention that management is looked upon as purely incidental to this—a means to render possible the teaching of many children together, and not as in itself an important instrumentality for shaping character. Discipline is looked upon as if its chief end were forcibly to bring refractory elements into conformity with general routine, instead of to touch the springs of life in each child and give supremacy in him to the better portion of his nature. When the thought of forming character can be substituted in place of these imperfect views in the minds of school officers, a great step will have been taken toward making moral education in our schools more effective.

It is possible to analyze in many ways the elements of moral training; our present purpose will be subserved by considering them, for practical ends in teaching, under three heads: I. The formation of right habits; II. the inculcation of fixed principles and right ideals; and III. the development of moral judgment. The distinct recognition of these aims, and systematic efforts to realize them in practice, ought to be pro-

ductive of more good than trusting to the vague impulses of the teacher, and to his desire to maintain government.

I. Habits rest upon that great law of our being that we grow to ways of acting which for a sufficient length of time we follow regularly, uniformly, and without opposition from within. The law is material, physiological, shaping bone, muscle, and nerve tissue; giving to the mature man the blacksmith's sinewy arm or the scholar's mental aptitudes. Some of the most important educational questions of our times turn upon the operations of this law. If a man lead a sedentary, bookish life up to his twenty-first year, will he take kindly and naturally to following the plow or to welding iron?

The five great school habits are regularity, promptness, order, industry, and accuracy. To have wrought them into the very fiber of the youth is to have done much to prepare him for civilized life. He has learned self-control and responsibility—the greatest of all lessons. John Locke says: "As the strength of the body lies chiefly in being able to endure hardships, so also does that of the mind; and the great principle and foundation of all virtue and worth is placed in this—that a man is able to deny himself his own desires, cross his own inclinations, and purely follow what reason directs as best, though the appetite leans the other way." The demand that the child shall be on hand every day and at an appointed time has, then, a higher purpose than mere convenience. It imposes self-control, the necessity of making other things conform to a known and regular duty. The orderly distribution of his time, the habit of applying himself to tasks though disinclined, subdues vagrant impulses and develops his efficiency as a worker in any field; while accuracy, the fundamental virtue of the recitation, unfolds in him the power to see and tell things as they really are, which constitutes the love of truth, or truthfulness. These results are more perfectly attained when distinctly conceived by the teacher as the true ends of his labors, so that he strives to bring the child into sympathy with them, that he may cherish a just pride and satisfaction in them.

II. There are others which will not flourish by the force of routine alone, but must be consciously cultivated. Honesty, for example, will not grow in a school without intelligent care. Every recitation affords opportunities and, unless intelligently supervised, incitements to dishonesty. It is natural to a child who is being tested to get help surreptitiously. Manifestly, vigilance and careful provision to diminish the temptation as much as possible are indispensable.

When the teacher stops here we have only the formal effect, which is called habit. But while right habit is excellent and indispensable, it is not the main support of character. It holds in formal, routine affairs, and these constitute, let us say, three-fourths of life. But mere habit does not

suit itself with certainty to varying conditions ; it is not adapted to resist the stress of temptation. Fixed principles are therefore required as the surer basis of character ; and the inculcation of these presents peculiar difficulties—and, we must add, is most commonly neglected. It is necessary, first, that they should be firmly fixed in the convictions of the child, and secondly, that they should become the real springs of his actions. After these ends, therefore, wise moral training will strive.

To attain the first right management is essential. Outward conformity with orders is not enough. It is necessary to try to lift the pupil to a higher plane of thought and action, to enlist his better nature in the effort to overcome wrong tendencies. Good management constantly aims to bring the pupil's nature into voluntary and glad conformity with what is right, so that he feels that he chooses to act thus, and finds increasing strength and self-respect in so acting. This, I take it, is Rousseau's meaning when he advises the tutor : "Let him (the pupil) be his own master in appearance, and do you take care to be so in reality. There is no subjection so complete as that which preserves the appearance of liberty ; it is by this means even the will itself is led captive." This is an education *for liberty*, by teaching how to use liberty rationally, such an education as every child in a free country is entitled to. It is an education which seeks to form the *mind* to virtue, and by this means to affect the conduct ; instead of being directed first to the conduct, in the hope that at length the mind will come into conformity. It aims to bring children as early and as constantly as possible under the influence of such motives as ought to control their lives, and so to make them free by a knowledge of the truth. Liberty is not absence of restraint, but self-imposed restraint.

To Locke's doctrine, therefore, that the power of self-denial is the foundation of all virtue and worth, is thus added that higher ideal which Plato introduces in defense of music : "Because," he says—"because rhythm and harmony find their way into the secret places of the soul, on which they mightily fasten, bearing grace in their movements, and *making the soul graceful* of him who is rightly educated, or ungraceful if ill educated ; and also because he who has received *this true education of the inner being* will most shrewdly perceive omissions or faults in art or nature, and with a true taste, while he praises and rejoices over and receives into his soul the good, he will justly blame and hate the bad now, in the days of his youth, even before he is able to know the reason of the thing ; and when reason comes he will recognize and salute her as a friend with whom his education has made him long familiar." An imperfect result of this sort is better than the most absolute submission to external force.

I shall put the worst results of the other discipline in the words of

Locke, which, it seems to me, ought to be ever present to the minds of those who have to do with the training of the young: "Slavish discipline," he says, "makes a slavish temper;" and I take it the slavish temper is cunning, deceitful, eye-serving, cowardly. "Slavish discipline makes a slavish temper, and so leads to hypocrisy; and when it is most successful it breaks the mind, and then you have a low-spirited, stupid creature, who, however with his unnatural sobriety he may please foolish people, who commend tame, inactive children because they make no noise nor give them any trouble, yet at last will probably prove as uncomfortable a thing to his friends as he will be all his life a useless thing to himself and others."

III. The fixed principles are few and simple; but they are general maxims, the application of which, under varying conditions, is complex and difficult. Hence the necessity of patient iteration, and of the effort to develop the moral judgment of the child in the application of them. "Line upon line and precept upon precept, here a little and there a little," such have always been the conditions of moral teaching. By patient repetition and practice the pupil at length learns to apply a principle of arithmetic and a principle of morals. In the one case as in the other, he often goes astray through ignorance and lack of judgment, and usually the rod is as inapt a teacher in the one case as in the other. It touches the cuticle and not the conscience.

The maxims, or general principles, are most effective in forming char acter when made the real motives for action, or the standards for judging it. Indeed, the chief difficulty is to keep theory and practice together. They tend to become as widely separated as the sanctuary and the marketplace. Consequently the incidental teaching is always the most valuable. If a child can be moved to do an act because it is kind, there is a moral uplift in it likely permanently to affect his character. If, on the other hand, he can be led to recognize that his conduct is culpable because unkind (as by the reproving question, "was that kind?"), his moral judgment is developed. By such means the ideal standard is kept in close relation to his own conduct, so that his consciousness plays about it, until it is taken up and assimilated into his nature. This sort of moral teaching is of constant use with young children; it is such as a wise mother throws about the earliest years of her offspring; and the school should fulfill its proper object of carrying forward the work of the family, and of supplementing it, as well as possible, where deficient.

Society is already demanding of school teachers that they recognize and turn to account more fully than they have done their opportunities for incidental moral teaching, by bringing the moral judgment to bear upon the practical relations of the knowledge acquired. How else are we to interpret the legislation requiring that physiology be made to yield

its proper lessons regarding the effects of stimulants and narcotics? Here, too, are our humane societies strenuously insisting that literature and science be used to quicken the imagination and touch the heart with kindliness to every living thing.

Any attempt to enumerate the fundamental virtues which ought to be cultivated in the schools is rendered difficult by the popular use of various terms to designate the same principle with slightly varying shades of meaning; yet it is desirable to make the attempt in order to introduce more definite views and aims. Out of these groups of terms it is necessary to select one or two which seem for general purposes the most effective. They will not be mutually exclusive, nor is it essential that the enumeration should be absolutely exhaustive. The enumeration is made rather for practical utility than for the systematic development of the subject. Viewed in this way it will be seen that the virtues to be inculcated in the schools fall into two groups; those growing out of our relations to others, which are essentially five, (1) justice, (2) honesty, (3) truthfulness, (4) kindness, (5) politeness; and those due to ourselves, (1) purity, (2) self-control, (3) industry, (4) prudence, (5) reverence, (6) courage. To the wisdom which comes of experience must be left, in the main, the teaching of the limitations of these, so as, for example, to harmonize justice and kindness, or determine in particular cases where courage should give way to prudence. Practically the school will have accomplished its object if it implants in the mind the ideal to be just and yet always kind, by prudence to temper rashness into true courage. The ideals which need to be most carefully cultivated at present are perhaps kindness, self-control, and reverence. The second may easily be made a point of honor and proper pride with most boys, and thus become, as Locke deems it, the foundation though not the spring of virtue in them. The last is lamentably lacking in our society, and our so-called humorous writers contribute not a little to develop the natural levity and irreverence of youth. It is the more necessary, therefore, to set up such barriers as we can raise by sedulously inculcating respect for higher things, for high character and for the ideals and beliefs of all men.

Success in moral training after the methods thus outlined will be found to depend upon (1) the character of the teacher, (2) the relations maintained in the school, and (3) the tone of public opinion in it, for these determine the moral atmosphere in which the child lives.

Example teaches subtly, day by day, and is the result of character more than of specific acts. It is necessary that the teacher guard against the appearances of evil, and have a nice sense of the way in which his words and his conduct are likely to impress his pupils. One of the finest compliments ever paid to a lady was this: "To know her is a liberal education;" and, over and above knowledge as a qualification for a teacher ought to

stand this elevating power of character and manners. It has not yet with us been assigned the place of importance which is justly its due. Until it is, our results will often be mechanical instead of vital.

Relations between teacher and pupils ought to be frank, in order to promote healthy moral growth. The child must not be driven to hide his life. He needs to expand and unfold himself in an atmosphere of cheerfulness, confidence, and inspiration. Cunning, and smartness, and secretiveness, and opposition, are the products of false management. Any discipline which leads not to the voluntary avoidance of faults, but to the secret cultivation of them and to pride in them, is wholly pernicious. Such discipline may produce outward order and obedience, but its fruits are apples of Sodom. Frank relations are the result of a spirit and attitude of helpfulness on the part of the teacher toward the pupil. Helpfulness gains confidence and co-operation, and is founded upon that sympathy which understands and appreciates both the weaknesses and the better impulses of childhood. Its fundamental law is, always appeal to the highest appropriate motive which can be made to work. Thus discipline becomes but an incident to helpfulness. It is neither retributive nor for the sake of example : there is no place in school for either of these sorts. It is purely personal, designed to add the strong will of the teacher to the weak will of the child, and thus help forward on the road of self-control. In all cases the less severe it is the better, provided it be effective, since the natural sensitiveness of the child is less impaired by it. To destroy this is to brutalize him ; and to respect and conserve it is the aim of rational management. We need teachers, not dominies ; leaders, not drivers ; those who inspire new life instead of new fear. Frank relations are possible only under such conditions, and frank relations are indispensable to right moral growth.

It was Locke's opinion that the school influences each pupil more than the teacher does ; but the school is in large measure such as the teacher makes it. If fit for his place, he does not suffer public opinion in it to drift and shape itself. His business is to mold it, by his acts, by his public utterances, by his private conversations. His art is to keep public opinion on his side, for few boys would not rather defy the teacher than the public opinion of the school. It is a pitiable blunder which compels a child to choose in such an alternative. He will defy the teacher to keep the favor of those with whom he is to live. Therefore, severe reproof in the presence of the school is a matter of extreme delicacy and should be avoided if possible. Whenever public opinion in a school has passed out of the control of the master, and especially when it sets steadily against him, it becomes a serious question for him whether his usefulness in that field has not departed.

This hasty review of the elements of moral training in the schools

makes it evident that the set lesson in morals is but a feeble part of the work. This has its place chiefly in the primary school. Here carefully chosen moral maxims and selections may profitably be committed to memory and deeply engraved by frequent repetition. They become, as it were, points of attachment around which the experiences of life crystallize. In my opinion every primary school should have a well-arranged series of these, which should be repeated almost daily by the pupils, singly and in concert, responsively and successively, until they become an indestructible portion of the school memories of each pupil. To this exercise might be joined talks about the maxims, stories selected for the lesson they teach and talked over in such a way as to develop the moral judgment in applying familiar principles; and simple instructions in the elements of good manners. In higher grades the same ends would be secured more effectively by the reading of biographies and anecdotes which have a power to inspire enthusiasm and give rise to elevating ideals—a kind of work now too much neglected. It seems to be easier to drift to formal ends and to learn dates, details of campaigns and the names of authors' works. Trifles these—mere impedimenta—compared with touching the imagination and lifting the life to higher companionships. Finally, current events wisely used yield their quota of moral instruction which may be practical and impressive in the hands of a capable master. In all these formal lessons the dangers to be guarded against are formalism and sentimentalism, which may only be escaped by intelligence and tact on the part of the teacher.

It has been the purpose of this paper to urge and enforce the following views:

I. That the moral education afforded by the schools is all-pervasive, found properly in the teaching of every class, in the general arrangements, above all in the management and discipline, the supreme purpose of which ought to be to form right character.

II. That the effect is limited not only by the nature of the pupils, but by the tone and tendency of surrounding social life.

III. That the morality is secular, enforcing principles which have been demonstrated by human experience and underlie social order, thus leading to religion through recognition of the moral order of the universe.

IV. That the elements of this work are, I., the formation of right habits; II., the inculcation of fixed principles and right ideals; and, III., the development of moral judgment. We are too often satisfied with the first alone, so that the result is unintelligent and unstable.

V. That these are accomplished together by instruction and management whose constant aim is to reach the intelligence and conscience of the child, and bring him into vital sympathy and co-operation.

VI. That the fundamental virtues to be cultivated are, I. (1) justice,

(2) honesty, (3) truthfulness, (4) kindness, (5) politeness; and, II. (1) purity, (2) self-control, (3) industry, (4) prudence, (5) reverence, and (6) courage.

VII. That success in their cultivation is conditional upon the character of the teacher, the maintaining of right relations, and the proper direction of public opinion in the school.

VIII. That formal lessons in morals are valuable chiefly in the primary schools, and altogether subsidiary in importance to the general spirit and aims of the teaching thus outlined.

# PSYCHOLOGICAL INQUIRY.

BY W. T. HARRIS, LL.D.

THE topic which has been assigned me by the president is one that claims the serious attention of the teacher. But it is one of the most difficult subjects of human investigation. While, therefore, all educators agree in the abstract that psychology or the science of the mind forms the central subject of study for the preparation of those who are to educate that mind, yet it remains after all the one subject least studied. The little study that is made on this subject is in general the most futile and inadequate because it does not develop a conception of the mind at all adequate to explain the science of methods taught in normal schools and teachers' institutes. We have excellent maxims and even treatises on methods, but the science of mind, that is taught to accompany them, directly contradicts all the presuppositions of those excellent methods.

All good theories of method in instruction start out with the idea that the mind or soul is a self-active being, that it is not a passive something to be molded like clay by an educational potter, but that it will develop through its own activity, "Not what the teacher does, but what he gets the pupil to do, is of value," runs one of the wisest of maxims. Says the great Diesterweg : "Educate your child for self-activity in the service of the true, beautiful, and good," and German pedagogy forever repeats as its watch-word, "*Selbst-Entwickelung*"—self-development, self-development! This, too, is the essence of Froebel's educational theory.

In our own day we hear the same maxim again and again from the advocates of the self-styled "New Education." But the "New Education" goes back to Comenius and adopts his paradoxical form of statement : "Learn to do by doing." The expression always startles and interests us notwithstanding its incompleteness and its ambiguity. Taken by the perverse or incompetent teacher, it will be construed to mean that man is not to think but to do external acts—exert his will in the form of external expression through the hands and the senses. But taken by the wise and cultivated teacher it will mean as its author meant it : the soul is essential self-activity ; it can be educated only by its own activity. Not only the body and the five senses are to be trained by using them, but the innermost essence of the soul itself, its pure thinking, is to be educated by doing ; that is to say by thinking. The mind is self-active and cannot be plastically formed by external influences, but only through the exertion of its own inward energy. It was Diesterweg who rendered this idea of self-development so popular in recent times ; but all great educators from Socrates down have emphasized in one way or

another the same thought and demanded of the pupil an exertion of his spontaneity or self-activity in order to educate him. Think carefully of the method of Socrates which dialectically led the pupil to discover by his own investigation the truth which he wished him to learn. "Rise from sense-perception and mere opinion to an insight into what is universal and necessary," said Plato.

But let us note with some attention the maxim of Diesterweg. The "Learn to do by doing" of the New Education does not give any hint as to what we should learn to do. The what to do was left for another maxim. But Diesterweg is careful to include two elements in his maxim—the fact of self-activity is placed in the foreground as the idea to begin with, then follows the guiding direction to show what to do. "Educate your child to self-activity in the service of the true, beautiful and good."

1. Self-activity is in every newborn soul as a spontaneity,—a possibility of unlimited action good or bad. But its activity must take a certain direction or else it will cramp and fetter itself. By bad action it will curtail the limits of its freedom, by good action it will extend those limits. In other words, the ideal nature of self-activity is expressed by the ideas of truth, beauty, and goodness, and in these directions the individual may develop himself without wasting his energy in self-contradiction. The opposites of the true, the beautiful, and the good, are the false, the ugly, and the bad. To do, or produce these things is to do or produce what is internally contradictory and self-nugatory, and what consequently reduces itself to a zero. Such use of self-activity fails to develop it; its endeavors do not build up anything; all its products are negative, and it is left in the end where it started—at the bottom of the ladder of human culture. But whereas it started at first with butterfly wings and mounting hopes, it now after its wrong efforts sits down in despair with an ever-gnawing worm in its consciousness.

Educate toward a knowledge of truth, a love of the beautiful, a habit of doing the good, because only through these forms can the self-activity continue to develop progressively in this universe. These forms—the true, the beautiful, and the good—will bring the individual into union with his fellow men through all eternity and make him a participator in the divine-human work of civilization and culture, and the perfection of man in the image of God.

2. But we may note here that these two elements that enter the maxim of Diesterweg admit of two special tendencies, the one being the tendency to prize mere spontaneity and to regard all that the child does through his own impulse and desire as natural and proper. It would permit nature to manifest itself without imposing upon it any forms; not even the true, the beautiful, or the good should be imposed upon it by an external authority. The other tendency lays most stress on the second ele-

ment, and would have education see to it that there should be no untrammeled spontaneity, but that the pupil should be compelled to exercise his self-activity, if at all, in the prescribed forms of the true, the beautiful, and the good. Hence arise two great parties in education in our day, and in every epoch. But it is not our object here to discuss these two schools of educational method. It is sufficient for us to remark that both admit self-activity as the primary fact of the mind that is to be educated.

3. What, we may now ask, is the system of psychology taught by these two schools of educational method in view of this primary fact of self-activity which confessedly underlies all methods of human education? It must be confessed that the prevalent systems of psychology are varieties of two general types which may be called respectively metaphysical and physiological: neither of these recognize self-activity as the supreme principle of mind.

The good old-fashioned psychology laid chief stress on the "faculties" of the mind. The weaker and more metaphysical—(in the bad sense of the word "metaphysical," signifying analytical abstract thinking)—adherents to this view of the mind went so far as to call these faculties "organs" of mind, thus betraying the fact, that they had unconsciously or purposely substituted the idea of life for that of mind. Life is organic being and always reveals itself in organs. Mind does not thus manifest itself, but its so-called "faculties" are degrees of self-development which arise as the self-activity becomes complex by repeating its acts of reflection. To this point we shall refer again. Thus the metaphysical psychology, whose fundamental defect is that it regards the soul as a substance or thing, instead of a self-activity, goes on to speak of the faculties of the mind as if they were properties of a mind-thing, instead of modes of activity of an essential spontaneity. In using the word "organs" for "faculties," metaphysical psychology goes over to the ground of physiology, or the science of living beings, and naturally enough becomes phrenology.

4. On the other hand, the so-called physiological psychology commences with the living organism and investigates the correlation of psychic phenomena with corporeal changes, and seeks to find what psychic phenomena may be found to correspond to the several corporeal stimuli.

Its chief industry may be said to be the search for an explanation of mental phenomena in bodily functions. These again it seeks to explain through environment. At this point it is quite evident that it has lost altogether the conception of self-activity and has become utterly hostile to the fundamental principle of educational method. Without self-activity in the form of will, there can be no human education. Herbert Spencer's *Psychology* (used in many of our Normal Schools), is founded partly on a metaphysical basis and partly on physiology, and it repudiates the free will altogether (see § 220, 1st Am. Edi.) as something utterly

untenable in scientific psychology. Spencer's system is metaphysical in that it establishes as *a priori* ideas such doctrines as the indestructibility of matter and the conservation of forces, while it is physiological in that it appeals to the study of the body for the main part of its details.

The importance of this attitude of physiological psychologists towards the educational idea of self-activity cannot be over-estimated because of its prevalence and polemical behavior at the present moment. The extreme view, that denies free self-activity altogether, is held by many; more moderate views, by the majority of physiologists; finally by a few there is a recognition of self-activity in its truth. There is nothing in physiological psychology that necessitates a denial of self-activity but, quite the contrary, even life itself rests on self-activity as an essential factor. It is only the trend or bias of the minds of the physiologists toward thinking of their object as an inorganic thing that leads so many of them to ignore self-activity. More familiarity with mental manifestations will doubtless lead the materialistic wing of physiologists to go over to the other wing of spiritual physiologists. As we do not wish to see any purely dogmatical authority set up in science, we hope that even this materialistic wing will hold by its convictions and defend them exhaustively, and only when a new insight dawns change its basis.

5. But it is evident that on the physiological basis psychological discovery is limited to bodily functions. The idea of life is as far as it can go without transcending what is physiological. A great service will be performed by those investigators who explore this field and demonstrate to science that thinking activity transcends physical functions, and refute physiologically the assertion of Moleschott that "thought is a secretion of the brain just as bile is a secretion of the liver." Then the limited form of self-activity which is the principle of life will be laid aside for the pure self-activity which we call thought.

6. Physiological psychology, as we have stated, limits its investigations to discovering physical concomitants of mental actions. What portion of the body is affected to movement or change upon occasion of a given mental act—what kind of motion and its quantitative value; also what mental action or response there is to various kinds of bodily stimuli; what part of the observation is external or "objective" experiment—and what part of it is introspection, are interesting questions. The presuppositions of the observation are (1) a world of time and space in which the body is conditioned; (2) an internal perception or reflection that can observe what is within consciousness—a subjective world of feeling whose form is time, and a world of thought whose form is neither space nor time. (3) Concomitance or succession is all that can ever be observed in these fields; each series of facts requires observation by a different mental act, the physiological by the external senses, the feelings and thoughts by in-

trospection of consciousness. You certainly can never perceive a feeling or a thought or a volition by touch, taste, smell, hearing or seeing. You may only infer the existence of a thought, feeling, or volition by some external movement or change which you perceive by the senses.

The scope of physiological psychology is logically limited at the outset. It can never catch a thought or feeling outside the internal self, and hence can never identify it with any external fact or object whatever, although it may fix an order of sequence or concomitance between the items of a series observed internally and a series observed externally.

7. The legitimate conclusion here therefore is that in all psychology, physiological or otherwise, the scientist who observes must be able to reproduce within his own mind for himself the psychological phenomena that he perceives, for he can never perceive any psychological phenomena in any other being. The mental phenomena of children as well as of adults, of savages as well as cultured people, can never be perceived as external phenomena, but only in one's self, and inferred to exist in others as concomitant to certain external movements or changes which are perceived to exist externally. Here we come to the paramount importance of insight into what we shall call pure psychology as a necessary preparation for any valuable study of the psychology of thought in connection with physiology. If an investigator does not know how to discriminate thinking and reasoning on different planes, it is absurd to expect that he will recognize those different planes of thinking or reasoning in others. Even clear human speech does not convey a generalization to the mind that is not cultured enough to make that generalization. The *Mechanique Celeste* of La Place, written as it is in clear French and translated into good English, cannot afford a sufficient basis of inference to an ordinary man for him to observe the psychological process that went on in La Place's mind as he wrote those eternal lines. The thoughts of Plato are so subtle to grasp that the ordinary reader does not catch them at all but only spells out the words of which the sentences are composed. And yet those thoughts are found, when one struggles up to them, to be the clearest light yet seen by the struggling thinker. What results could a child or a savage get by examining the qualifications of a Bain or a Herbert Spencer? Such processes of thought as he was familiar with would enable him perhaps to identify, by the aid of the language, the gestures and physiological performances of those men, some feelings and thoughts of his own as similar to probable thoughts of those distinguished scientists. They on the other hand might be able to make a pretty complete inventory of the mental processes of a child or savage, because, being more comprehensive, they include him and can find his elements in themselves by introspection. But were Bain or Spencer to undertake an inventory of Plato's mental processes they might fall as far short of the task as the

child or savage would in examining Bain or Spencer. At least this seems probable from the list of thoughts which they have thus far found in themselves and given to the world.

The old illustration of the swine and Isaac Newton is suggested here. Both saw the apple fall, but the swine was more acute in his sight and got a better view of the apple. But the psychology of the swine was not complexly developed—he perceived objects by his senses that were good for food and his chief emotional function was love of food. Accordingly he exerted his will power, untrammeled by any moral considerations, ran and devoured the apple. Isaac Newton, on the other hand, saw the apple fall, but besides an appetite for apples, in his mind there was a higher appetite for truth. He noticed the moon in the heavens and reflected through long complex thoughts upon the force that made the apple fall—seeing that the rapidity of fall might with a sufficient trajectory motion just convert the straight line motion into an orbital movement. Of a sudden, therefore, the fall of the apple became one with the revolving moon, and all the stars became one system with all the atoms by the law of gravity. What could the swine identify in the psychology of a Newton? Only those two or three insignificant matters of appetite and sense-perception that saw and devoured an apple; the thought that comprehended the laws of the celestial harmony did not exist for the swine.

What is to be expected from researches in physiological psychology, limited as it is? To this we reply: many and very great services, especially to family and school education. All of the provinces where the body acts as a means of expression to the external world, and all the provinces where the self-active mind uses the body as a means of exploring the world—all these provinces have of course a physiological factor which should be thoroughly understood, qualitatively and quantitatively.

All cases of insanity, idiocy, all matters of hereditary descent; all that pertains to the use and abuse of the five organs of sense; all that relates to food, clothing, and shelter as favorable or unfavorable to the development of the soul; the questions of comparative psychology of nations, of the modifying influences of climate, age, sex, and occupation; and finally such phenomena as sleep, dreams, somnambulism, and the occurrences that are supposed to belong to the night side of nature, together with epidemics and superstitions. Here is an immense field in which physiological psychology is bound to be of increasing service to man. But so long as it is cultivated apart from pure psychology and with a sort of persuasion that there is no self-active being that we are concerned with in psychology, it will be impossible to expect any first-class results.

8. We have alluded to the distinction between life and mind. Aristotle in his treatise on the soul—the most important book read by the Arabian and Scholastic philosophers—treats of plant life, then of animal

life, then of rational life. Here life is a common term. But the distinction is so great that it is well to confine the term life perhaps to the first two stages.

In plant life the process is one of nutrition and of continuation of the species. Even in plant life we notice the appearance of self-activity. The plant reacts on its environment. It seizes upon some portions of this environment and strips off the foreign shape and gives those portions of the environment a new combination in the form of a vegetable cell. It has been self-active and has impressed its own form on external material. In the animal we find feeling and locomotion as well as nutrition, which it retains in common with the plant. Notice that feeling does not seize and destroy its environment and make it into a cell—that is the activity of plant life or nutrition. But in the self-activity of feeling the environment is left uninjured, while the self-activity limits itself to the extent of forming out of itself an environment in some sort dynamically equivalent to the reaction which the environment produced upon contact. So feeling is a sort of duplication of the self-activity—a sort of making for itself and out of itself an object in some way equivalent to the environment. There are feelings of touch, taste, smell, hearing and sight. In these there is localization in organs. The environment is essential and the body has special organs for the reception of it. But the perceptive part is the self-activity duplicating itself somehow in the manner described. In taste there is a process of assimilation, the foreign shape being dissolved preparatory to conversion into an animal cell. Taste feels this. Taste may be called the nutritive or plant-sense. In smell there is a perception of a chemical change; in hearing there is a perception of collision and elastic resistance—cohesion resisting disintegrating force. In sight there is neither attack nor resistance, we have reached the highest form of sensation, because its perception is purely ideal, not a perception of a struggle for existence.

9. Above sense-perception is the second self-activity of the mind, or representation. Just as feeling is a duplication of self-activity, so that one phase of it becomes the object of the other—so in representation there is a new separation of self-activity by which it not only makes its activity its object, but in addition to that it does this consciously and therefore freely. In sense-perception it saw the object because the object was there to be seen. In representation the mind sees an image because it chooses to recall it for contemplation.

10. If the mind turns from the represented image to its process of reproducing that image, it becomes thinking because it contemplates a universal instead of a particular. The mind is free to recall a representation and repeat it forever. By the view of its freedom it comes to see that all particular objects of sense are not themselves self-activities,

but products of self-activity, if we trace them back to their ultimate origin; hence it comes to recognize all individuals as belonging to species or classes, and it becomes possible to give general names to objects and activities, and language is born. The transition from simple recollection to conception of the universal is, therefore, the great center of interest to the psychologist. Here is the line between the immortal individuality of man and the individuality that does not survive death of the body. Here is the place where man distinguishes himself from the animal by language and the power of unconscious generalization. The ordinary processes of abstraction, comparison, and classification are utterly unconscious at this stage, but language is invented and higher and conscious stages begin which belong to thinking.

11. In thinking there are to be distinguished three stages as most important—of course infinite subdivision is possible here as elsewhere.

(*a*). The lowest stage of thinking considers its objects as isolated and independent things, and ignores the importance of relations. As it isolates its objects and abstracts them from all relations, I call it "abstract" thinking. As it supposes that all relations are non-essential, and due to merely external combining of objects, it insists on thinking atoms as the ultimate elements of existence. It is the atom stage of thought. As it knows by experience that bodies are composite, its theory sustains itself by holding that large bodies are made of small bodies.

(*b*). But a higher stage of thinking supervenes when the mind begins to become conscious of essential relations. When it discovers that one object depends upon another in such a manner that a change in the one modifies the other, it comes to see that objects are not independent existences, but that they are terms of ratios. Change one term of a ratio or fraction and you must change the other, or else the value of the ratio or fraction will suffer change. To find that an object is a term of a ratio is to find that it is not a whole complete existence in itself, but that it is a portion of an including whole, and is what it is only through the activity of a process. At this stage of thinking it discovers that objects are phenomena and not essential beings. Take this stone under my feet. It seems to me at first to be something complete in itself, but observation and reflection convince me that it is heavy and attracted to the center of the earth, and to the sun and to all the stars, however distant. Change the weight of the earth and you change the weight of this stone, and the relation of its gravity to its cohesion changes, and who knows whether a single quality of it would remain as it is? Everything is phenomenal, a manifestation of a sort of ratio of forces hidden behind the visible objects, and these visible objects reveal those forces in their properties and changes. Since the discovery of the law of gravity by Newton our studies of the world have been coming gradually to this stage. I call it the

concrete stage of thought, because it thinks things in their concrete relations.

(*c*). But this is not the highest stage of thought. Even natural science has achieved a higher thought than this in its best minds. Plato long ago discriminated four stages of thought, and called the highest stage the one that thought things as a totality or as a whole. Looking not at any result in particular, but at the spirit of the scientific inquiry or at the method it uses, we shall find that its purpose is to study an object as a part of a process having a history. It traces out the several stages of the process and finds how the object came to be as it is and what it will next become. Any process is complete, of course, when its end produces its beginning again. Then each fact is explained by all the others, and each fact contributes to the explanation of all others.

Science aims to place everything and every event in some system so that each shall illuminate all, and all shall illuminate each. Each thing is some stage in an evolution process. When some small arc of the total process is discovered there begins to be an explanation. When the links of the process are all found then the explanation is complete. Such a conception was that of Humboldt in writing his *Cosmos ;* he tells us that he wishes to describe the world as a " whole moved and animated by internal forces."

Here we come directly back to our idea of self-activity. The highest stage of thinking comes to recognize that nothing can be a complete or a whole unless it is a self-activity. An entire system of relations becomes self-relation just as correlation of forces also presupposes that the whole process is a self-determined force, or a self-activity. Let force *A* act to pass over into *B ;* and *B* to pass over into *C ; C* into *D,* etc., and force *Z* to produce *A* again. Then summing up the process : *A* produces the series *B* to *Z,* which series in turn produces *A* again ; hence *A* produces itself through these others which it generates. So, too, every link in the series may be regarded as the origin and destiny of each, and each appears under the category of self-activity.

Here, therefore, the highest thinking of science comes into harmony with theism, because it comes to see that the universe is founded on an absolute self-activity, and that what it creates takes the form of self-activities.

12. We see too, that the spirit of specialization which is now abroad in the world presupposes this idea of self-activity in that it presupposes the oneness of nature in the so-called principle of evolution. The investigator may safely trust himself on his lonely journey into details, because he is sure that these details are fragments of the total product of some process, and that he will come back to unity again through the completion of the discovery of the history to which all these fragments belong.

13. It only remains now to name briefly some special questions as

typical of the several applications which the teacher will find in the work of education. Psychology in the school-room finds obstacles in the way of progress, in many of its branches of work. There seem to occur phases of arrested development in passing from one stadium of thought to the next one. Particularly in the elementary schools it is found that the child halts at the point of using facts as typical facts and reasoning with them by the syllogism of analogy. He does not always pass over readily to the use of conceptions and the employment of the inductive or deductive syllogisms proper. This is sometimes called the symbolical stage of consciousness, and belongs to the kindergarten, and is said to precede the conventional stage of consciousness which is presupposed in the primary school.

Most teachers have observed in arithmetic that in passing from simple numbers, to ratios or fractions, whole platoons of boys and girls stumble and seem unable to make the step without great difficulty. The first stage of thinking always stops at the simple term. When the ratio or relation becomes the object he cannot think it; he can think both terms of the ratio singly but not both together.

Much like this, only farther advanced, is the passage from arithmetic to algebra—from numerical values to general values. It is here again that the immature mind cannot leave its isolated things and think relations. It cannot give up its fancy that things are real independent entities and think them as phenomenal, that is to say, as temporary phases of processes.

So in the study of languages, to take one's mind off the concrete meaning of words and think of their classification by grammatical function in the sentence is a serious and difficult mental effort. To go from etymology to syntax, or the logical relation of words in a sentence, is a full step higher, because it passes from relations whose terms are simple objects to relations whose terms again are relations.

Here should be mentioned devices of elevating the pupil over these difficulties by a sort of flank movement—giving him a sort of special drill in a higher form of reflection and thereby, as it were, startling the mind out of its mechanical routine of the lower form of reflection. The reflex influence of its language upon a people is one of the most important subjects of psychological investigation. Take the Chinese language, which scarcely conceives a differentiation of the parts of speech out of nouns; what form of thinking does that imply? Take the inflected languages, Latin and Greek, compare their acquirement with that more difficult form of thinking which acquires and uses a language like the English, which indicates its parts neither by inflection, nor wholly by position in the sentence, but by a sort of unconscious syntactical thinking. Then there is the question alluded to the other day in the Council of Education—whether there is not a limit to the thoroughness with which a subject

should be taught—whether the going beyond the proper standard does not deaden the mind. Finally (as there is not room in this paper to enumerate even the provinces which contain psychological problems like the foregoing), there is the important question of the trichotomy, or threefold division of the soul into feeling, will and intellect, and the proper education of each.

14. Feeling as it appears in the child at first involves heredity, and its manifestations are in the form of instinct. It is immediate and rules as a sort of nature. Whatever becomes a part of one's nature comes back to the form of feeling again. Hence the way to educate feeling is to make over a new nature by acting on the will and intellect. Take the youth who has a perverse emotional nature through heredity. Make him form ethical habits by unceasing practice of what is right. Teach him to see the good view of the world as a rational and necessary view, and when the good habit has become formed and the intellectual view is accordant with it, the problem is solved by the new habit and view becoming immediate again as a feeling. But the secondary feeling, inasmuch as it is based on what has been reasoned out, and not on habit following blind instinct, is not a blind feeling but an enlightened feeling. The tendency of all education must be from blind feelings into enlightened feelings.

We can see even the scientific insight or the third stage of thinking become a sort of immediate instinct in such men as Cuvier, Agassiz, Lyell or Humboldt. Give the one a bone from a newly discovered fossil and he will immediately draw for you the entire skeleton, for he has learned to see the whole animal in a single bone. Give to Agassiz a scale of a new fish and he sees the whole fish in it, and can discourse to you on its habits. Lyell can tell its history by a glance at a pebble. So in literature, the great poet sees the whole history of a community in the deed of a single man. Learn to see the whole in a part, is the highest maxim of psychology to intellectual education. Learn to do the least human deed in the image of the highest good and beauty, is its maxim for moral education.

Educate the heart? Educate the character? Yes, these are the chief objects, but there is no immediate way of educating these. They must be educated by the two disciplines—that of the will in correct habit, and by that of the intellect in a correct view of the world. When the practical habit and the intellectual view coincide, then it becomes a matter of the heart, and character is the result. "Character," said Novalis, "is a completely developed will." It is also a completely developed intellect. Because in God intellect and will are one, so in man the highest aim is to unite insight with moral will. Self-activity becomes intellect, self-activity becomes will. At first self-activity is mere spontaneity without reflection. The highest character is infinitely reflected self-activity.

## HOW TO LEARN.

*AN ADDRESS AT THE NATIONAL TEACHERS' ASSOCIATION AT SARATOGA, N. Y., JULY 16, 1885.*

BY A. D. MAYO.

A FEW weeks ago our good President Soldan requested me to come to Saratoga and open the discussion of the expected paper by Colonel Parker, on the famous maxim of Comenius : "We learn to do by doing." Now, at the last moment, the somewhat appalling summons comes to me to step into the great vacancy caused by the non-appearance of the gallant colonel, and, for half an hour, try to convince a disappointed audience that anybody is presuming to stand where he should have been. Happily for me, there is but one Colonel Parker and I am not his prophet. I am not a "great educator ;" not even an humble school-master. You must, therefore, rely on some one of the eminent teachers who will follow me to tell you how this maxim reads from the stand-point of the practical worker in the school-room. My pleasant function, in "Ministry of Education," is to come up, at intervals, where great school-keeping is going on and the noble army of 500,000 men and women instructors is represented in convention, water my own diminishing stock, and then go forth once more as a "circuit preacher" to spread the good news of the coming kingdom of the New Education among the 49,500,000 American people who don't keep school. All that I can say will be a layman's observation concerning the way the average American citizen of the school age that shall finally be formulated by the Council of 51, goes to work to learn any good thing. So pardon me if I speak in parables, telling how this process has impressed itself on me, and throwing in a few reflections which may sound too much like extracts from my old sermons to meet the purely secular or philosophic taste of some of my hearers.

A few months ago, down in the pine woods of Florida, I saw what may be truly called "a self-made man." I doubt if he could read, write or cipher, and, until the location of a new hotel brought him into notice as one of the curiosities of the country, I suppose he had never talked an hour with an educated man. He was one of the poor white people who form the basis of the population of the vast "piny woods" realm of the South land; although his wife boasted a little property in a "cross-roads" hamlet, somewhere in Georgia. He had come to this desolate neighborhood several years ago, "squatted" in the heart of the unoccupied woods,

flung a dam across a stream, fenced in a few acres of land, set up housekeeping with his "old woman" in a queer log hut, built a mill for grinding corn and pounding rice, having made with his own hands the furniture of his shanty and the implements of his trade, and generally was working out his temporal salvation on his own line of operations. He had put together all his buildings without a nail, by using wooden pegs whittled by himself. His plow was made from a crotched sapling. His cart, all but the tire, was wrought out of the woods. Indeed, the only things for which he was indebted to the outside world were the tire of his cart-wheels and the mill-stones with which he ground his corn. He had a little steer which he called "a two-year old yearling," which drew his funny cart all alone to the railroad station, backed the load up to the store-house, and walked home with the return load. He was a veritable human curiosity, worth going a thousand miles to see; a man who had wrought everything out of himself, whose "environment" represented next to nothing learned from others.

But the outcome of it all was a mill in the piny woods that ground corn for the people that lived thereabouts, at the rate of a few bushels a day. And as the corn was all brought from the North-west by the railroad, costing about ninety cents a bushel, and the extra grinding in Chicago would hardly increase the cost, it can be seen that the labor of this good man and his wife, for a dozen years, had come to nothing save a new object lesson to illustrate what any man, anywhere, comes to who tries to get on by a literal acting out of the useful maxim: "*We learn to do by doing.*" He had been "doing" all these years, with industry, patience, and self-sacrifice enough to build up a good-sized settlement down there in the wilderness. But, lacking the education that comes from contact with men, the knowledge of what has been done and the mental power that couples one's self to the human race, he had been left, at sixty, a human curiosity in the pine woods instead of becoming a master mechanic in a civilized community.

Some twelve years ago I was called to the pastorate of an old church in a beautiful city of New England, which, in thirty years, had been developed out of one of the pleasant villages of the valley of the Connecticut. I found the old society just ensconced in a new church edifice; the first building planned by the famous architect, Richardson; also a Southern boy from Louisiana. The late Dr. Bellows pronounced this building the most beautiful parish church in the world. But the world is a large place, and if we substitute New England we may not be far from the truth. The new church was indeed a lovely sight—resting on its little Mount Zion as lightly as a bird just rising for a flight; all the time preaching, by sunlight and moonlight—in summer amid its elms and ivy, in winter with its warm red sandstone walls and gables breaking out

from their light covering of snow—preaching more eloquent sermons on the higher life of truth and beauty and love than I was ever able to deliver from its pulpit. The architect had come home from his studies abroad with an ideal parish church and parsonage in his imagination which, had it not been cut down by an over-economical building committee, would have been unrivaled when materialized in wood and stone.

But how much went to the planning of that first parish church of the young architect? He also learned "to do by doing;" and unless he had been at the center of all his knowledge, working out his own notions, elaborating his own conceptions, and finally producing a church as near to himself as the first-born child to the father, no high result would have come. But behind, above, beneath, all around him, the very atmosphere of art in which he wrought, was the achievement of the whole glorious company of architects up to the day when the corner-stone of his little parish church was laid. All the thought and feeling and performance of all the grand master builders in ancient and modern days; all the prayers and anthems and homilies of all the saints and singers and preachers of eighteen hundred Christian years and a thousand more of ancient Hebrew ministry, coupled with all that goes to make a church in our new age, in our new land, had found a home in his capacious soul.

And from that day the architect has gone on, through a memorable career that has given a new impetus to American architecture. He has wrought out his ideals in scores of noble buildings, in numerous cities of many States;—solemn interior of Boston Trinity Church, where Phillips Brooks preaches as grandly as Richardson has built; Springfield Court House, whose calm granite front looked "law," even before the architect carved "*lex*" up there in letters of stone; charming country houses scattered up and down a dozen commonwealths; superb spires and towers; Kingston Hall, Burlington College, Malden Library, glorious staircase of the new Capitol of the Empire State; and, better than all that he has been permitted to build, plans for the ideal cathedral, the perfect dwelling, the magnificent university; too splendid to be ventured on by a people who insist on finishing in a few short years what the old world spends a century in completing. He "learned to do by doing," but what a wondrous deal besides the mere individual "doing" has gone to the making of such a man. One of the foremost architects of America, he has only stepped out a little in advance of the column of illustrious builders of all ages and countries;—for a few years holding up the banner of progress, till he, too, finds his place in the advancing rank, and another, greater than he, appears at the front.

It was all very well for old Comenius, in an age of pedantry, when

education, by the learned, was supposed to consist in the reproduction of classic forms of language, and originality of thought, style and life was almost buried under a mountain of mechanical imitation, to launch the notable maxim: "*We learn to do by doing.*" Of course we do. Nothing is really done by any man till he passes through all he has learned and seen and absorbed from the whole world, and fixed on his performance the stamp of his own manhood. But I doubt if Comenius ever so much as dreamed of the perversion of his own maxim to the "base use" of fostering that petty conceit of "individualism" which is becoming the St. Vitus dance of our New Education in our land. Certainly he did not mean to say that we learn to do only or chiefly by doing; that the child, to-day, must go back to the beginning and verify all things by actual experience that come to him as the legacy of the generations; that the average pupil must become a chronic experimenter in physical facts, social life, thought, even in morals and religion. He did not suspect that no man can be worthy of regard as scholar or thinker unless he can shove a plane, chisel a scroll, or stand in a leather apron before a turning-lathe. He did not mean that the mere working up of a splendid individual manhood or womanhood, as "our being's end and aim," with only secondary regard to the growth of the individual as a vital part of a divine order of human society, is the problem of Education.

He meant, I suppose, that every soul is launched into life, in some respects an original combination of the elements of spiritual being, with a mission to find its own place in the universe of souls; that, to this end, it must put forth its own best energies, look on life through its own eyes, use its own hands in work, and in all right ways try to find out its own special faculty and achieve its own highest destiny.

But, nevertheless, what we call our individuality is the least part of us; only that little angle in which we are differentiated from the glorious, common human nature whereby we are made in the image of the Almighty God. It is not the special, the individual, that in which we differ from our kind, that declares you or me the child of the Eternal One, the heir of immortality, destined to become a son or daughter of the Most High. It is the common human nature we share with all; the growth along with and into all other men; our relations to family and State and church and school and society and humanity—that give the assurance of our lofty relationship to the highest in the universe and the prophecy of our endless life through eternities to come.

I remember a striking experiment in the extreme way of holding this great maxim of old Comenius (who, by the way, seems to me to have anticipated everything we call the New Education) in a little college of which I had the honor to be a trustee. We had imported an ardent disciple of the Natural Method of getting at Nature, fresh from Battersea,

England. He came and began his work of instruction in nature-knowledge with a hundred youth all the way up from low grammar to advanced college grades. He sent all books where Colonel Parker sends the spelling-book, and neither entreaties nor threats could move him to give any pupil so much as an occasional amble on that pernicious "pony," the text-book in science. Hard by the college campus was a wonderful region of forest, ravine, glade, and glen, braided up by clear rivers, a veritable natural paradise. The course of study in that college for several years in this department consisted in sending a hundred young folks, of both sexes, into that paradise to observe nature, tabulate their results, and, by the aid of their zealous leader, become each an original observer in this enchanting field. You may be sure a great deal was done. I never saw a hundred young people together so excited with the desire of discovery and investigation, and I believe there was corresponding growth of the mind from that daily wrestling with the great mystery in the glen; to say nothing of the human coeducational "annex" that flourished even more rapidly than the famous Harvard enterprise of that name. Each of these youth carried away a habit of observing nature; a lively interest in the physical world; to some extent, a method of observation and a moderate amount of useful knowledge.

But I observed that none of these students, even graduates of the higher departments, carried off any appreciable notion of what had been done in the world of science up to the day when their labors began. So the scientific world, to each of them, consisted of the little circle of his own observation, within a radius of ten miles, in a peculiar region of one State of this Union. And along with this went a profound sense of his own grandeur as an original investigator into the mysteries of creation. That teacher had done what a learned Frenchman says he found going on in certain private normal schools in our country: "One man had persuaded a houseful of young people that he was the greatest of men and they next to him." And what a defect that was; to send forth class after class of ambitious young Americans, without the knowledge of the world's past achievement that might be gathered from the judicious use of a good text-book by a wise teacher. For when this class came up from their daily exploration in the glen, at the point of effervescent enthusiasm over their success, that calm, impersonal, concise text-book would appear before them like the genius of humanity, representing the mighty struggle of the loftiest intellects through four thousand years' communion with the stupendous mystery we call nature. Would not this habit of absolute reliance on individual observation and verification, essential as it is, under such circumstances, become the most misleading of all delusions, sending forth into a new and forming civilization, a generation of eager and powerful youth with the impression that this world virtually began with George

Washington, and all realms of life are a blank sheet on which the new gospel must be written by every graduate?

Why, in our education, can we not take up one good thing without dropping another? We know that a reliable book represents the achievements of mankind. If we have been content with committing that book to memory, let us repent and take our children back to nature, the mother of all books and all men. But meanwhile all men are greater than that dear boy and girl of ours, individually, and the real problem of the New Education seems to me, to train our children, not only to do by doing, and grow by daily wrestling with the all-encompassing mystery, but to add to that personal achievement a widening knowledge of what has been done, and what is, after all, the crown of culture—a wholesome reverence for human superiority, a faith in human nature and a trust in the Omniscient Love that enfolds it all.

So, while it is necessary that we should hold up, in the new schools of our new land, the adage of wise old Comenius: "*We learn to do by doing,*" we shall make the worst failure of the ages, if we fall into the conceit that we are set up here, on this western continent, to begin from the beginning and make all things new. There is a provincialism of an old country, in which a cultivated man or class is so overpowered by what has been done that life is spent in reverent admiration of the past, and men are not even moved by curiosity to learn what is going on in the new region where our lot is cast. But there is a provincialism of the frontier, even more mischievious and a thousand times more absurd, that does not know there has been any life of the ages before the settlement of the young city it inhabits; where man stands up a creature without a past; to whom history is what old Dr. Johnson use to call it, "only a last year's alamanac;" in whose sight all the mighty achievements of mankind are matters of stolid indifference or vulgar jest.

It is easy enough to raise a laugh in a bright new city, over the narrow scholar; the fastidious man of society; the young lady in London who declared herself afraid to walk the streets of Philadelphia, "for fear of the bears;" the leading soprano in my New England church, who asked concerning the Cincinnati chorus at the great musical festival: "Can these people really sing?" But what of the old fellow in the valley of the Miami, who on being told that I came from Boston, inquired: "Do you like to live way down there?" the normal school pupil in the Northwest, who said to her Sunday school teacher: "Is Paul dead?" the young traveled lady whom I met in Europe, who adored Michigan Avenue, beyond all Paris Boulevards, Berlin *Unter der Linden,* London Oxford Street, because the cars on the railroads next the lake "made it so lively;" what of the great Colonel Robert Ingersoll, touching the summit in the reported suggestion that, "On the whole he could make a universe better than God?"

All this assertion of the omnipotent originality of the man speaking, illustrated by the ragged edge of the New Education; the ethical or agnostic religion; the household dissolving view of easy divorce; the thousand and one wild and reckless theories that caper on the edge of the abyss of personal ruin and social wreck; all these are the outcome of this morbid individualism. They run down to the tap-root heresy that the individual man is the be-all and end-all of our human life, and what is not done in that capacity, to that end, is a failure. This notion is the specter that hovers along the path of our new methods of Education; the spirit that in the name of science would read out the soul of man and the spiritual side of the universe; that by a reaction from the over-mentality of the past university, would bring in the worship of brute force in college sports, and the glorification of hand work as the test of manhood.

Let us not falter on our road to that New Education, which is the honest attempt to walk in the highway, along which the universal love leads every human creature by divine methods we call natural, training the soul for perfect manhood and endless life. But let us beware, meanwhile, least we isolate ourselves in some little angle of the inclosure that surrounds this illimitable field, or find ourselves in placid conceit reposing off on a side track of the "through route," along which a new generation may be carried to a better civilization. And let us remember that this better civilization is only that life of the true, the beautiful, and the good, realized in each as a member of the whole, which the Great Teacher most fitly named the Kingdom of God on earth—the beginning of the Kingdom of God in heaven.

## THE CHILD'S ENVIRONMENT.

BY CLARA CONWAY, MEMPHIS, TENN.

THE word environment has come to have a wider meaning to-day than in the past, or perhaps, it would be better to say that the philosopher whose thesis is environment has a larger audience to-day than in the past. Plato, "the mountain of philosophy from which all drift boulders have been detached," gives the first place to advantages of nature, and Socrates teaches "a trinity of environment—culture, nature and the divine."

To-day, science, theology, philosophy and fiction have parallel lines of thought from the great fountain-head of cause to the ocean of effect, or, in the language of science, from the infinite to the finite, from the absolute to the relative, from the real to the apparent. The student—following these lines of thought—must see that climate, food and occupation form man's physical environment, and heredity, government and institutions, his mental environment.

Browning says, as only he can:

> "He fixed thee 'mid this dance
> Of plastic circumstance,
> The present thou, forsooth, would soon arrest;
> Machinery just meant
> To give thy soul its bent,
> Try thee and turn thee forth, sufficiently impressed."

One of Shakespeare's most exquisite touches is in the quarrel scene of Brutus and Cassius; after the reconciliation Cassius says: "Have you not love enough to bear with me when that rash humor which my mother gave, makes me forgetful?"

The greatest novelist of the century sums up the causes which determine a woman's lot, and is led to generalize in such strong words as these: "That things are not so ill with you and me as they might have been is partly due to those who lived faithfully a hidden life and now rest in unvisited tombs."

Emerson—poet of the soul—thus epitomizes: "Man is a quotation from all his ancestors." And the world's best book—the compendium of all wisdom—chronicles the great law: "The iniquities of the fathers shall be visited upon the children unto the third and fourth generation.'

We are to deal to-day with education as a moral environment, including not only lessons but all the subtle influences that help to form character; an environment as complex and far-reaching as any physical environment. The question that most closely concerns us as teachers is this: How does this subject of modern environment affect us in relation to every child that comes within reach of our influence? I say every child, rich or poor, proud or humble, graceful or graceless, fine or coarse, for each owes an obligation to God, himself, and society, and I believe this obligation is in proportion to the light that shines along his path and the power given him to see. We may be the only light the young soul knows—all else may be storm and darkness. The evil tendencies of vicious parents may have found their way into his nature; the circumstances of his life may have tended to repress the good and to develop the evil, and when he comes to us, heavily laden with the sins of parents and stifled by the oppression of a narrow environment, it is difficult to discover the divine within him. This is our first duty to the child: to lead him to see that he is made in the image of God, and to show him that he may grow toward a divine ideal. Teach him to believe in himself as the child of God and he will soon begin to see the natural goodness of his nature and to realize his power to overcome evil. Put his soul into his own hand, open his eyes to its wondrous beauty and glory, give him the key—faith in himself and trust in God—and the work is well begun. This faith will make him believe that all things are possible to him. Cultivate it in the right direction, and the *best* will be possible. A man of rare and wonderful insight once said to me: "Make a child believe that he *can* go through a stone wall and he *will* go."

I know a woman, in whose life aspiration and hope were well-nigh struck dead by teachers most kind but most unwise—who, in their anxiety to cultivate a false and unnatural humility, repressed the desires of the soul by an artificial and deadening process. There was no growing vision of an active life, useful and honored—no thought of perceptions quickened into unfolding beauty by the touch of a woman's hand and the breath of a woman's love. There was no dawning sunrise of happy toil, or sunset of contented rest. The thumb-screw was put upon ambition and the growth of happy audacity was checked to make room for a weak self-distrust that the world would have taught her soon enough. The result was—not entire repression, for nature was too strong not to assert itself—but a long period of unrest and struggle, an absolute distrust of powers and possibilities and the steady growth of a spirit of fear and trembling that placed an impertinent interrogation point against every plan and purpose of her life. The wise and faithful teacher will not thus shut out the "heavenly airs and lights." She will help the child to understand the strong voice that speaks its message to his soul, and show

him that he has the power to answer. If it should be wise to check a too fearless self-confidence, she will appeal to love, the desire for which is as strong as faith in the heart of every little child.

She will look far into his soul, study the workings of his mind, and seek for the motive by which his nature is to be best aroused to action. Such a teacher, by her very being, is a never-ending lesson in humanity and love : she is developing character like her own ; she is perpetually spreading around her the virtues that make life beautiful, and is creating an atmosphere that makes one of the strongest forces towards the formation of a perfect moral environment. The child is born into an infinite school and takes lessons from every page in nature. To help him reach this open book is to put him in harmony with God and to rouse to unselfish action the soul that, in its turn, will help other souls ; this is the noblest work given men to do : it is creating an influence that will last through all time. Let us understand then, that to educate a child in the broad sense is to see his soul, to study the secret springs of action, to put into his hand the means of the best development, and to lead him towards "the lofty mountain-summit of perfection," through the inspiration of motive.

This same motive will be the secret of your own power as teachers. If your work be for mere worldly honor or profit, it will be yours doubtless, if you use the right means, for "Whatsoever a man soweth, that shall he also reap." The highest motive looks beyond to a power that gives wings to the soul and through honor or dishonor, darkness or sunshine, sickness or health, weal or woe, sees only and cares only for the highest good to the child—the unfolding and directing of his whole nature. Power of every kind is thus developed ; power of will, thought and sentiment ; power to judge, reason and generalize ; power to govern himself and to lead others to self-government ; power to spread around him the blessed sunshine of love and joy. The chill soil of mental and spiritual poverty is warmed into fruitful action ; the evil spirits are exorcised, and the young soul rejoices in a power akin to that of the springtime, when

> "Every clod feels a stir of might,
> An instinct within it that reaches and towers,
> And groping blindly above it for light,
> Climbs to a soul in grass and flowers."

Philosophers claim that heredity is only a habit. If that be true, and if the surroundings can be made to favor the fixity of habit, that is, if by our means, environment be made to create a second nature in the child, then we may easily see that the future progress of the race is largely in our hands. We first change the environment of the child to whom na-

ture has not been kind, and then labor for his happiness in the new surroundings, that is, for a complete adaptation to his environment. The progress of humanity consists, I think, in an adjustment of this kind by such means as I have named.

To hold the destiny of the nations in our hand is a stupendous power—one reaching into infinity—but not so strange or so stupendous as the already fulfilled prophecy, "A little child shall lead them."

Comprehending the height and depth of this great trust and looking always towards a realization of the highest possible ideal, we may hope for such a nation of men and women as the world has never seen, liberal and just, generous and ardent, animated with the fires of unselfish action and united by the common bond of humanity in a brotherhood of love.

A word to the young teachers who hear me to-day! There will always be those about you who will say: "Don't waste your time and strength in useless work! It won't pay! These fine-spun theories they talk about won't work out! There's no use in trying!" *There is use!* I *know* that eternal good will come to the race through the influence of your best work, and I *believe* that material good will follow honest, patient, wise effort. The places of honor will be vacant so that you may walk up and fill them. Be ready to fill them worthily and well. Believe in your mission with a steady, unfaltering faith, and believe too that the little child who comes to you for help and guidance is an eternal blessing from the hand of God, to grow, beneath your touch, from "strength to strength" and "from strength to beauty." Do not be disappointed that the things which most arouse your enthusiasm and hope are no inspiration to others. "The old thoughts of men are contending in a sharp battle with the new," and it may be that those in whom you most trusted for strength and inspiration, are weak and faltering. You may want to cry out in your wounded strength: "Be bold! Be bold!" but keep the temper and guard the tongue, always remembering that "the perfection of tolerance is to tolerate intolerance."

After morals, manners. "Manners are stronger than laws," says Emerson. "Self-command is the main elegance: keep cool and you command everybody." There is a sweet benignity of manner, a tender graciousness, a subtle charm of presence which wins all hearts. If this grace is not yours by inheritance, get it by conquest. Tender, loving thoughts and sympathetic action will put sunshine into your face and a nameless charm into your manner. I know a man in Tennessee who governs a school of twelve hundred children by the power of a wondrous, personal charm, so that when he says, "Come!" they come, "Go," and they go. They cannot resist him: every boy and girl in that busy little community loves him with a deep, abiding love,—and believes in him with a child's full, tender faith. When I said to him, "Only *you* can do this beautiful work!" he

answered, "You can do it as well!" If it be so that I can, I will! If it be so that *I* can, so can *you*, fellow-teachers and friends.

In this and every other good work, you will meet criticism and censure. Our purest motives are often misunderstood or purposely misrepresented. No matter! Go steadily on, through the hot shot of reproach or ridicule, seeking only to be true to your own highest convictions of truth.

I have in mind the little girl who persuaded her brother to take her place in the softly-cushioned sled, while she undertook to plow the deep snow with her little feet, so that she too might move something or draw somebody. This drawing power is a divine gift to the human soul. The great Teacher himself said, "I will draw all men unto me."

To draw one human soul to better things is to be a partaker of His power, the power that "makes for righteousness," for "sweetness and light." Thus shall we

"Live
In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
Of miserable aims that end with self;
In thoughts sublime that pierce the night like stars,
And with their mild persistence urge men's minds
To vaster issues."

## PHYSICS IN COMMON SCHOOLS.

BY PROFESSOR CHARLES K. WEAD, UNIVERSITY OF MICHIGAN.

Two thousand years ago the immortal geometer told his royal patron: "There is no royal road to geometry." In modern phrase we might say there is no railroad with sleeping-car and through tickets to carry the indolent man; the holy land of knowledge is reached only by patient, long-continued tramping.

This lesson of individual effort has been so often presented that to-day we are overlooking a correlative truth, and thereby are sacrificing seriously the interests of those pupils who are, or should be, studying physics and other sciences. A thousand teachers attempt, as guides, to lead their pupils into the almost pathless wilderness; few of them know how many pitfalls, precipices, quicksands, and mazes are before them; many of them have ventured little farther than they expect their pupils to go, and know not how dangerously near these have come to being ensnared. The best worn trails are those blazed by the text-book makers, but these often cross and diverge in a distracting way. Because there can be no railroad, shall there be no highway? Must every teacher still be a guide and law to himself, knowing little of the experience of others? Fellow-teachers, I count it one of the greatest benefits and responsibilities of such an association as this that, as it has done in the past, it may combine the experiences of many, may survey and construct a national highway along which the pursuit of truth will be easier and surer than is otherwise possible, and with the authority that wise action always confers may say, forsake your rough trails; "this is the way, walk ye in it."

But lest attention be directed too much on the distant end to be reached by the fortunate few, we will drop the figure and confine our attention to the subject assigned—Physics in Common or Graded Schools. That the aims and best methods of physics-teaching in our schools are not clearly defined or well understood throughout the country, must be known by unpleasant experience to young teachers, and from observation also to older ones. Our friends who teach mathematics and the classics know far better than most of us what they want to do and how to do it, and they have usually gone much farther in their studies than they expect their classes to go; this knowledge and preparation is an important and often overlooked element of such success as their training undoubtedly has. The absence of this knowledge often makes the teacher uncertain

and half-hearted in his work, doubtful of success, ready to try any new scheme or book that is plausible, and at other times prevents him from reaping the rewards his enthusiasm deserves.

It is known to some, at least, of those present, that an attempt has lately been made by the Commissioner of Education to collect opinions from teachers in various parts of the country on the subject of physics-teaching. These opinions were placed in my hands for collation, and so I suppose I am asked to address you to-day. In the time allotted me I can only hope to give in outline the conclusions I have reached from the examination of these opinions and of the views of European educational writers; the opinions themselves and the discussion of them are already in print.*

We must for this hour confine our attention strictly to the question of physics-teaching in common schools if any improvement in this teaching is to result from this day's discussion. We are not to consider scientific *vs.* classical studies, nor the relative merits of physics and other sciences, nor the work in normal schools, colleges or technical schools.

At the outset we may start with the confident assurance that nothing is better settled by the history of educational theories, or by the practice of the best schools, than the fact that physics is an essential study in a course that pretends to be well-rounded and liberal. It, more than any other science, deals with familiar things about which the pupils have been acquiring disconnected information for years; not even botany and physiology (the teaching of which I advocate heartily) are likely to be taught more objectively. Among all the sciences physics is pre-eminently the central one; the biologist, the astronomer, and the geologist, as soon as they pass beyond classification, are daily applying to their needs the instruments and methods of the physicists; and it goes without saying that students fitting themselves for industrial occupations will find many opportunities to apply physical principles. But besides serving these obvious utilitarian ends (which most of us are in danger either of disparaging unduly, or of exalting too highly) the materials furnished in the study of physics may be used with great success for mental training; by the use of these, unless the teacher is a slave to a text-book, the observing powers and the senses will be cultivated, the powers of expression will be trained, the judgment will become keener in detecting resemblances and grouping together allied phenomena. I know, as many of you do from personal observation on children even under school age, that valuable results may be obtained in these directions by studying the phenomena of physics as well as of organic life.

Now, while the ends thus far named will be sought by every competent teacher of a science in any grade, I believe the measure of success in their attainment will be most conspicuous in the lower schools. For

* Circulars of Information of the Bureau of Education, No. 7, 1884.

as the pupil grows older other facts than those furnished by his own observation occupy a larger and larger share of his thoughts; his reading brings him a multitude of new ideas, but he has relatively less mastery of them than of the few he had in earlier years; further, in his training additional ends are to be sought, as ability to use books, ability to discover, understand and apply principles and laws, and to use them in deductive reasoning both with and without mathematics. If the pupil has not had the earlier training he has irrecoverably lost a part at least of what he might have had. If one says that the ends sought by the study of the sciences, apart from the useful information, can be gained in other ways, we may challenge him to name the studies from which they are likely to be gained, and we may recall the obvious truths that no study is very profitable unless the pupil's attention is secured, that this is best secured by arousing his interest, and that no school studies are more interesting than the sciences.

But besides the benefits that may come to the favored individual from the opportunity to study physical facts at several different times in his course, we must remember also the needs of the great majority of pupils who will not go beyond the grammar school. Accordingly this conviction that the rudiments of physics (and of some other sciences) should be studied in primary and grammar schools has for a long time been expressed in official programmes in Europe, and in this country has found frequent expression in the demand for the so-called object lessons and oral lessons. Although the expected results of these lessons have not been realized, the mere recognition of the claims of scientific training in primary education has been a step in advance.

The principal obstacles to further advance are two :

1. A feeling that programmes are already so full as to leave no time for this work ; but many of the best schools do find time for it, and the training is so natural and so appropriate for children that it is not likely in practice to make other interests suffer. One teacher has told me of her great satisfaction with the results in a country school, of the sort of work now advocated ; immediately after recess, when the scholars were still too excited from their play to settle down immediately to their books, ten or fifteen minutes were devoted to questions on familiar matters, to showing objects, to performing simple experiments, etc., and I am sure in this teacher's hands the work did not degenerate into the unscientific manner of telling facts, often and so deservedly condemned.

2. The second obstacle to introducing proper scientific training into the lower schools is found in the fact that the teachers generally have not prepared themselves for this kind of work ; they have never enjoyed such training, and however earnest, have little time for special preparation or little knowledge of how to make it. The best advice I know of about this

preparation is found accompanying the consistent, definite and elastic scheme of science studies drawn up by Dr. W. T. Harris for the St. Louis schools; the poorest teacher ought not to fail utterly in carrying out the plan, the wisest one will not be unduly fettered by it.

But in spite of all obstacles, we ought not to rest satisfied till scientific studies, properly taught, occupy from one to two hours every week throughout the first eight years of school life; of this time one-fourth to one-third should be given to physics, the subject coming two or three times in the eight years' course. In schools where the classes are small, two or more classes may be combined for the science work; and in large towns sometimes it may be advantageous as a temporary expedient to let special teachers go from school to school, as is done in England, for science teaching, and as we do for the teaching of music and drawing.

Consider now the secondary schools. It is from these that a large part of the teachers in the lower schools and country schools must come; so the attention of all who desire to improve the condition of science teaching should be directed first of all to these secondary schools, and whenever it is possible, teachers should be secured who have made special scientific preparation at least in those sciences they are to teach. In passing let it be noted that the ordinary required science work in a college course, ought to be shaped for the majority of students, and so does not afford *special* preparation.

In these secondary schools, we find the same obstacles to improvement in the teaching as in the lower schools, and an additional one—need of apparatus. But in spite of them all the study of physics has found a place on almost every programme. But when we look deeper than the mere recognition of the subject, we find a great diversity of opinion or of practice on most points connected with the high-school work and physics; as to the aims and nature of the work, use of text-book, time and place and the course, introduction of laboratory work, preparation for college, etc.; yet I believe the teachings of experience are clear on some points.

First.—At no other time in the course, and with no other study, is there so good an opportunity to obtain the benefits of inductive training, and at the same time a more useful knowledge of physics will be acquired, if the inductive method is followed, than is otherwise possible. I count it, therefore, a misfortune for the student if he is deprived of the benefits of this training, either because physics is not in his course, or because his teacher thinks only of "hearing a recitation." How then are these benefits to be secured? The only condition that is indispensable (an earnest purpose being presupposed), is that the teacher should understand what he is aiming at—what the inductive method is, and how far it may wisely be followed in education.

A host of educational writers are in substantial agreement on these

points—thus the Rev. J. M. Wilson, in the finest essay on this subject that I know of, says: "The method (of text-book and lecture) will be an attractive one and will meet most of the requirements, but it fails in one. The boy is helped over all the difficulties; he is never brought face to face with nature and her problems. . . . The one power which the study of physical science ought pre-eminently to exercise and almost to create, the power of bringing the mind into contacts with facts, of seizing their relations . . . of groping after ideas, and testing them by their adequacy—in a word, of exercising all the active faculties which are required for an investigation in any matter—these may be dormant in the class while the most learned lecturer experiments with facility and explains with clearness. . . . Training to think—not to be a mechanic, or surveyor—must be first and foremost the teacher's object." And the late Professor Joseph Payne, says: "The teacher is a superintendent or director of the learner's process, pointing out the problem to be solved, concentrating the learner's attention upon it, suggesting experiments, inquiring what they result in; bringing back the old to interpret the new, the known to interpret the unknown; requiring an exact record of results arrived at—in short, exercising all the powers of the learner's mind upon the matter in hand, in order to make him an accurate observer and to train him in the method of investigation."

In carrying out this method of teaching, plenty of time must be allowed on the school programme, for mental growth cannot be forced; in the opinion of the great majority of teachers who replied to the inquiries of the Commissioner of Education, nearly or quite one full year of daily work should be devoted to the subject. The use of a text-book is generally deemed necessary, although it is much more difficult to follow an inductive method when one is used. But I believe a very simple compromise will be attended with excellent results. Postpone the use of the book for a few weeks and occupy this time in the thorough study of a few topics by the "method of investigation." The difficulty in this is usually to provide home work for the pupils. But a plan of leaflets that I have elsewhere suggested may meet the trouble. These leaflets would cover the easiest parts of mechanics and heat, and perhaps electricity; they should not contain principles, or laws, but only questions intended to recall to the student's mind phenomena already familiar, descriptions of very simple experiments that he can perform and instruments that he can see, and questions on experiments already shown by the teacher, all so arranged as to lead the mind to recognize a truth or principle common to all. The thoughtful study of these and the review and writing up of notes on the previous lesson would furnish enough home work. The work in class would include recitations, or reviews of leaflets previously distributed; the principle involved would be drawn out by judicious questioning and the

should be clearly stated by the teacher, some deductions be drawn from it, and then be left for the students to think out before the next day some new deductions or applications, or to solve some problems involving only easy mathematics. Before dismissing the class, the new leaflets will be distributed and the experiments necessary to illustrate them will be performed.

Such a plan as this might be very profitable for one or two or three months, but I would then advise (after a thorough review), that a good text-book be taken up for the rest of the year; for many of the things that one ought to learn about cannot well be taught in this way; many principles and laws could not be discovered by school boys at all, some only by refined measurements and mathematical assistance: these if studied at all must be given on authority and be well illustrated by experiments; but there are enough easy topics to give such a good drill in discovering principles as will vitalize all future study of physics. In all the work frequent and thorough reviews are indispensable.

Thus far nothing has been said about laboratory work, for until the expression is used with more precision than usual and until more experience has been gained in conducting it, its exact value in the high school cannot be justly estimated or dogmatically asserted. While it is unquestionably of great value where all the conditions are favorable, its advantages and difficulties are not yet generally understood, so I fear it is premature to urge its introduction into all secondary schools. Still I would encourage all teachers who are in earnest about the work to begin it in a modest way, and urge them also to communicate to others the results of their experience.

But we shall not come to any agreement on the subject till terms are used with greater precision: does the advocate of laboratory work intend that the experiments shall furnish the materials for induction, or shall they be mainly illustrative and deductive? Does he mean, as unfortunately some writers do, demonstrations by the teacher instead of work by the individual student? Three different significations of the expression laboratory work should be carefully discriminated although in practice they cannot be kept absolutely distinct:

1. An instrument-making course that is specially appropriate in normal schools.

2. A qualitative course in which little apparatus is made and not much time is given to making measurements; this is probably the sort of work most suitable for high schools.

3. Physical measurements: this is for the most part advanced work, and so usually follows the study in college of a good text-book. But even in the grammar school the ordinary weights and measures should be provided and used by every child, and in the high school course a few measure-

ments in mechanics, heat and light should be made if laboratory work is provided at all.

Whether laboratory work be introduced or not, the student must get familiar with many experiments, and my experience in examining students from various preparatory schools has led me to think that good would come from agreeing on a short list of experiments that may be considered as fundamental, never to be omitted from a high school course.

Difficulty is sometimes felt in distinguishing the kinds of work proper to schools of different grade. In addition to what has been said already on this point, we may draw some suggestions from a recent article by my colleague, Dr. Winchell.* In it he points out with unusual clearness how in becoming masters of any science we have three kinds of acquisitions to make:

1. The facts which are the basis of the science must be acquired by observation or experiment, from pictures or description.

2. The principles that underlie and co-ordinate these facts must be acquired; then only does a science begin: these generalizations may sometimes result from the activity of the pupil's own mind, but must usually be dogmatically communicated to him.

3. Deductions from these principles must be acquired; they form a large part of any science, and may sometimes be made by the student, but most of them must be suggested by or taken on the authority of others.

In the primary schools it is hardly possible or appropriate to do more than lead the children to the knowledge of some facts; in the successive grades of schools, successively larger portions of the time may be given to principles and to deductions; while in popular scientific lectures high generalizations and far-reaching inferences are called for.

Between these views and those I have been advocating I find no conflict: for if we must depend so much on the authority of others, it is surely worth while to have some training by the method of investigation that we may know how to judge of and use authorities.

Applying now these views to the question of physics-teaching we may give greater definiteness to them by numerical expressions as I have done in the following table, showing a reasonable division of the time between the acquirement of facts, principles and deductions in various grades of schools. The numbers presuppose the acquirements of all the grades preceding it, and of course do not claim any high precision. A moment's thought will show that the numbers might be very different for some other science.

* *Fortnightly Index*, July, 1884.

Percentage of time to be given in the study of physics to—

| | | PRIMARY. | | GRAMMAR. | | HIGH. | | COLLEGE. | POPULAR LECTURES. | |
|---|---|---|---|---|---|---|---|---|---|---|
| Facts presented by | Observation | 60 | 90 | 70 | 65 | 70 | 45 | 50 | 25 | 20 |
| | Experiment | | | | | | | | | |
| | Pictures | 40 | | 30 | | 30 | | 50 | | |
| | Description | | | | | | | | | |
| Induced Principles | | 5 | | 10 | | 15 | | 25 | 30 | |
| Deductions, Mathematical and other | | 5 | | 10 | | 25 | | 35 | 50 | |
| Study of Instruments | | 0 | | 15 | | 15 | | 15 | 00 | |

In conclusion, I ask your approval of the following points, the testimony and arguments for which are found in this circular of the Bureau of Education; four of the points I believe lie along the line where our national highway is ultimately to run.

1. The primary reason for the teaching of physics in our schools is the peculiar mental training it can give; for the trained mind is better able to acquire and to use facts than one that is untrained.

2. The ideal course of study in physics toward which we should strive, as rapidly as competent teachers are found, includes in the primary at least one hour a week for a year, in the grammar school from one to two hours, and in the high school five hours a week for a year.

3. The best results will be obtained if in all grades the teaching is inductive in spirit rather than dogmatic; little time should be spent on facts, principles or deductions that cannot be made thoroughly clear by observation or experiment. In the grammar school especial attention should be given to the study of common instruments and to industrial applications of physical principles.

4. Some study of physics should be required for admission to college, both for the sake of the student and to improve the character of the work both in college and in the secondary school.

5. A committee of experienced teachers should be appointed by this Association, who may co-operate with any similar committees from other educational or scientific bodies, to consider, without disparagement of any other studies, linguistic or scientific, how physics-teaching in our schools may be improved and made more uniform throughout the country.

# CIVIL SERVICE REFORM AND THE PUBLIC SCHOOLS.

## SOME OBSERVATIONS ON THE TENURE OF OFFICE AND MAINTENANCE OF TEACHERS.

BY HENRY RANDALL WAITE, PH.D., PRESIDENT AMERICAN INSTITUTE OF CIVICS.

GOOD citizenship and good government in a republic are convertible terms, and both stand for popular intelligence and virtue. The equipment of men and women in every sphere in life for the proper discharge of their citizen duties is therefore of such importance that we can bestow neither too much nor too careful attention upon the schools in which, under the provisions of our laws, the children of the republic receive so large a part of their intellectual and moral training. Nevertheless, in some respects, in thousands of schools, the provisions thus made by authority of law for the adequate training of the youth of this nation, indicate less of intelligence and less of thoroughness than those made by the wise herdsman for the care of his stock, the thrifty farmer for the raising of his crops, or by private individuals generally for the promotion of success in mere money-making. We are now entering upon a new era in the life of our republic, which is marked not only by the establishment of a unity of the whole people, based on the recognition of the fact that every State and every community is a constituent part of an undivided and indivisible commonwealth ; but by the undertaking of a work for the purifying and exalting of our governmental efficiencies. Let it not be forgotten that the schools in which we train our citizens at the public expense, and the teachers employed in them under the provisions of our laws, are to be duly recognized in the complex machinery of our civic organism as among the active efficiences which we vaguely describe as the "Civil Service." A school, like a light-house, is supported by legislative grants, because numbered among the efficiencies for the meeting of public needs ; and the teacher has his humble place in the civil service of his State, as the light-house keeper has his in the civil service of the national government. Regarding our schools as parts of our civic machinery and our teachers as public servants, who, in this broad sense have a place in the civil service, we shall find no lack of opportunity for the application of civil service reform in the conduct of our common schools. Especially is this true in relation to the compensation and tenure of office of teachers, in which we shall discover a present source of many

and serious evils, all of which have been invited by legislation, and which only legislation can cure. The need of reform in this "branch" of the "civil service" will be made evident by considering the evils referred to as follows: (1) As related to the character and success of the teacher; (2) As affecting the teacher's profession; (3) As related to the educational standard; (4) As related to the work of the Normal School; (5) As affecting the character of our future men and women; (6) The responsibility and the remedies.

## I. Tenure of Office as Related to the Character and Success of the Teacher.

Experience must be numbered among the essentials to success in the work of teaching. To expect from a clumsy plow-boy upon his first introduction into a watch-making establishment, the mechanical knowledge and delicacy of touch required in handling the intricate machinery of a chronometer watch is as wise as to expect that an inexperienced youth, when he first enters the school-room, will have the full knowledge of the child nature, its needs, and how to meet them, which are the distinguishing marks of the skillful and successful teacher. It goes without saying that drill in the mere theory of teaching, however thorough, is not in itself a guaranty of success. Important as such training undoubtedly is, it cannot be denied that the question of actual fitness for the work of teaching can be determined only by a continuance in the calling sufficient for the gaining of adequate practical experience. Nevertheless, in the face of these facts, by withholding inducements for the acquisition of this qualifying experience, we continue deliberately to perpetuate incompetency, adhere to the low standard of instruction which follows, and thereby cruelly rob our children of their right to the best equipment for the duties of the future which it is in our power to give them.

An eminent educator, Mr. T. B. Stockwell, tersely summarizes the indispensable characteristics of a good teacher as follows: First, a love for children, which affects all of the teacher's acts, and largely determines the disposition of his pupils towards him; second, self-control, without which there can be no control of the school; third, a positive character, one that is possessed of the power to impress itself upon others; fourth, faithfulness, which is the pledge for that full discharge of duty which can alone win the highest success in any sphere of activity; and finally, ability in imparting knowledge, which is of even more importance than the amount of knowledge possessed.

I am sure that the distinguished gentleman whom I have quoted will heartily unite with me in the belief that, whatever his natural aptitudes and his intellectual equipments, the teacher is also dependent for that

degree of development which leads to the fullest success, upon the essential to which I have referred, viz., opportunity for the best possible practical experience in the work of instruction. If we examine the essentials which Mr. Stockwell has so admirably summarized, we shall find that "love for children" in general is not a sure promise of that love for children in the school-room which establishes in the teacher the qualities of patience and gentleness and leads to the best relations between the teacher and the taught; we shall also find that the "self-control" which is practiced in casual meetings with one's fellow-men is no sufficient guaranty of the self-discipline which must lie at the foundation of successful school discipline; we shall discover that the "positive character" which must be an essential possession of those who would impress their pupils, if its positive elements are to be wielded for good rather than for ill, must, in the teacher, be curbed and controlled by a wisdom only obtained by experience; we shall also perceive that the "faithfulness" which is the pledge for that full discharge of duty which can alone win the highest success must be supplemented by practical experience in order to its right application; we shall learn that the "ability to impart knowledge," justly regarded as of more importance than the mere amount of a teacher's knowledge, is a qualification as to the very possession of which nothing can be affirmed, of any person, until the experience of the school-room has put his abilities to the test. Well may this thoughtful educator declare that the teacher's profession is one of the most, if not the most, exacting in its demands upon the individual, and that the number of those who are fitted to enter it is limited. In the face of these facts, we must, with shame, confess that the local officers controlling our schools have not reached that point in wisdom where they clearly understand that the successful training of the child demands in the teacher the possession not only of the highest equipments in the way of natural abilities and preparatory training, but also that adequate compensation for services, and that security in office, which can alone prepare the way for the experience in practical work which, as has been said, is the final and highest test of a teacher's qualifications. School boards, school committees, and the people who stand behind them, have yet to be converted from the folly of expecting the noblest and best results in teaching—the training of our children for the highest manhood and womanhood—from incompetent hirelings, or from competent and otherwise promising neophytes, who are discouraged upon the threshold of a chosen avocation, and who give to it, until they can escape from it, a spiritless service because they have no encouragement to make it their life work. That discernment which enables the faithful teacher to discover the hopeful elements in the dull student, as well as in the gifted and brilliant, and that use of opportunities which enables him to apply the wisest methods in the right develop-

ment of each, demands not only a proper degree of scholastic knowledge, and a purpose to apply impartial and wise treatment to his pupils, but an appreciation of individual characteristics which is the result of the experience acquired in actual contact with children, by study of their needs and habitudes. Student nature, as has been remarked, is *sui generis;* the life of the student is characterized by tendencies, sentiments, and a spirit which he must rightly understand who is to successfully mold the individual character. To be unable to appreciate these peculiar characteristics, or to adapt himself to them, dooms the teacher to failure. The sympathy which begets sympathy, the kindliness which begets good will, the unaffected and intelligent interest in the individual which makes the teacher a source of inspiration, the just and considerate treatment which commands respect and is the basis of the best discipline—all of the vital qualifications of a thoroughly good teacher—whatever his primary equipments, can never be called into high exercise, throughout our free school system, until our teachers shall cease to be trammeled and borne down by the adverse conditions of penury and insecurity in office.

## II. Tenure of Office in its Relation to Teaching as a Profession.

One of the mooted questions of the day is that of the teacher's right to recognition as belonging to a profession, in the sense in which the term is applied to the avocation of the lawyer, doctor, and minister. That the importance of his duties and the essential qualifications for their discharge, considered in the abstract, ought to secure for the teacher a position *pari passu* with that of men following the pursuits named, there can be no question. To claim that the abilities and acquirements necessary in those who prepare others, in all stages of their progress, for admission to the learned professions, are in any degree inferior in kind to the abilities and acquirements whose degree and character they thus chiefly determine, is plainly a *reductio ad absurdum.* That is a paradoxical view of affairs which traces the stream higher than its source, and assigns to the men who lay the foundations for success in professional careers, a position in public esteem below that occupied by the classes of men whom they, more than all others, are the means of making what they are. Nevertheless, there is a basis in truth for this false estimate of the relative value of the teacher's office; it is not to be denied that, as a class, counting the multitude of the unqualified and inefficient, teachers are not entitled to, and are making too little progress toward that professional recognition which their vocation should command. We may desire and talk about, but we cannot expect a change in this abnormal condition until we have sought its causes and applied the needed remedies. We must recognize, first of

all, the fact that a profession and a calling, whatever the original meaning of the terms, have ceased to be synonymous, or to represent equal values. A calling may now represent an occupation or employment entered upon without special forethought, "taken up" in the absence of any large degree of preparation; and with no special purpose of devotion to it as a life work. A profession, to-day, represents something which is precisely the converse of this idea. If we seek for the distinguishing characteristics of the latter, we shall find them to be, in brief, the embodiment in a recognized class of the purpose which seeks to promote the highest interests of the race in a common field of effort; and we shall find this ambition accompanied, on the part of those privileged to exercise it, by abilities and acquirements which can result only from patient study and persistent effort; and added to this, as the natural consequence of such preparation, will be a determination to make the chosen pursuit a life work. Thus, as has been wisely said by Dr. Payne, "A profession is a body of men hedged about with rights, privileges, and prerogatives denied to others." The three learned professions, law, medicine, and theology, as he observes, "did not owe their origin to self-assumption, nor are they the outgrowths of caste, but are the results of the reverence that is instinctively felt for superior wisdom, skill and worth. If we apply these facts to teaching as a profession, we shall discover that the conditions of membership in the teaching class are fixed by law, and admittance is guarded by formal examinations. In this we have seemingly one of the marks that distinguish the profession from a mere 'calling,'—but what is the test for admission? That they must have gained the amount of knowledge possessed by every intelligent and moderately educated man or woman. This test, then, is formal and not real; our defenses are shadow and not substance. If the possession of ordinary knowledge is the test of fitness to teach, then there is no real ground in the law for recognition of teaching as a profession."*

If teaching is to be elevated to the dignity of a profession, it must be placed, as Mr. Payne contends, on a parity with the other learned professions, by requiring of all teachers that special knowledge which constitutes the science of teaching. That this result can be attained so long as the work of the teacher, in comparison with that of the lawyer, the physician, and the clergyman, is made unremunerative and uninviting, is not to be expected. Law, medicine, and theology would cease to be held in esteem as learned professions, were it possible to apply to them the methods which make the adequate remuneration of intellectual labor no longer possible, and tenure of position a matter dependent upon the selfishness or caprice of incompetent or unthinking officials. So long as excellent teachers who would be glad to make teaching their life-work, could they be assured of such remuneration and appreciation as are found

* W. H. Payne, Paper read before the Mich. S. T. A., Report, 1879, p. 171.

in the professions referred to, are driven from our schools, we shall perpetuate a condition of affairs which makes it impossible for teaching to take its rightful place among the professions. Not until we have opened the eyes of the citizens in our communities, and the law-makers in our legislatures, to the full significance of the momentous fact that we commit to the teacher, whether he have wisdom or be without it, the work of laying the foundations for the character, culture, social opinions, moral ideas, and all that contributes to high manhood and good citizenship in a nation of sixty millions of people; and that his is the loftiest and most important of vocations—not until then will teaching take its proper place among the professions. And not until this work has been done will our schools be committed to the hands of a class of men and women who will bring ability and devotion to an avocation which they shall honor and exalt, and which will honor and exalt them.

### III. The Effects of the Teacher's Tenure of Office upon the Educational Standard.

I need say little upon this subject. If it can be shown that the present conditions affecting the teacher's continuance in his calling and his devotion to it degrade the standard of teaching, we are plainly confronted with conditions which, in like manner and in like degree, lower the educational standard throughout our entire system. School provisions and school methods are not likely to rise superior to the character and quality of the men employed to give them efficiency; and should this in any instance be the case, it will not long continue to be so. The best of methods and the wisest of provisions cannot prevent the degradation of the educational standard, and the corresponding loss in the value of instruction, when the teacher fails to measure fully up to the ideal set for the school. The ability, the efficiency, and the devotion of the teacher constitute, in truth, the most accurate gauge by which to register the standard of the school, be it high or low. The fact most worthy of emphasis in this connection is the uselessness of the well-meant efforts put forth for the raising of the school standard by legislation, votes of committees, and resolves of school boards in advance of that elevation of the teaching standard, to secure which demands the abrogation of present usages, and the adoption of the means which shall exalt the avocation, attract to it the highest grade of ability, and make its work one which shall demand the devotion of a lifetime.

### IV. Teacher's Tenure of Office as Related to the Work of the Normal School.

It is wise and patriotic to regard as matters of grave concern the provision of means for the proper preparation of those who are to become

instructors. Normal schools, and the best methods for their conduct, are matters worthy of even more than the attention bestowed upon them. It needs no argument to enforce the truth that thorough preparation for any calling is one of the surest guaranties of success in its pursuit. In relation to these high and potent instrumentalities, I would ask earnest, thinking educators everywhere : Has sufficient attention been given to the matter of the teacher's tenure of office as affecting their final and full fruition ? That our normal schools are forced to contend with other and more immediate difficulties, is not to be forgotten. We find too many of them with principals ostensibly directing, but who, like thousands of our common school teachers, are in reality but perfunctory helmsmen of educational landsmen, who lay down rules for the management of craft upon whose decks they have trod only as holiday visitors, and for the navigation of waters upon which they have never sailed, and can pilot only to shipwreck. But whatever may be said of institutions cursed by the vicious ignorance of political control, unquestionably among the first essentials to the highest success of our common schools, are normal schools under the untrammeled direction of men whose zeal has never permitted their eyes to see the Dante-like prophecy of lost hope which turns so many from the gateway of a chosen profession—men who are conspicuous for conscientious devotion to their calling, and whose persistent and faithful study of the true philosophy of education has led them to a real knowledge of its simplest facts. But, in contemplation of such schools, guided by such men, is it not pertinent to ask : Of what avail is it at so large an expense of money, and at such a priceless cost of time, with even the best of machinery, to fit such numbers of men and women for a calling from which they will turn in despair at the entrance, or from which they will gladly escape at the earliest opportunity ? In the painful fact that so few of those specially trained in our normal schools are found to pursue teaching as a profession, do we not find the suggestion of an imperfect adaptation of a means to an end, an underlying evil which largely destroys the usefulness of these schools, the correction of which is essential to their highest success, and which demands our profound attention ? And to what evil are we to attribute in larger measure the unfulfilled promise of these professional training schools than the wage barrier, the repellent suggestion of unrequited toil, which the ignorance, the indifference, or selfishness of our tax-payers has erected at the very threshold of the teacher's profession ?

### V. Teacher's Tenure of Office in its Effect upon the Character of our Future Men and Women.

Dugald Stuart believed that the imagination is the principal source of intellectual growth. Superintendent De Wolf, of Ohio, adds, that this

inventive and creative faculty, like the reason, is called into use at an early day to make up into practical forms and combinations the added ideas and mental power gained from books, and emphasizes the necessity of proper wisdom in the daily direction of the youthful forces, the satisfactory development of which is essential to mastery in any calling. "This intellectual mastery," he wisely observes, "secures that manly self-control and self-respect which are among the first and highest requisites of the citizen, and which lead to life-long habits of intellectual activity. Study and methods of instruction should seek to vitalize the thought employed in the industries in which the pupil is to be engaged through life." In presenting these considerations, he urges the necessity of providing persons properly qualified who shall incite and lead the pupil on in appropriate studies. In other words, we need instructors whose qualifications shall enable them to give to our youth all of the advantages of the best education attainable, who possess the ability to adapt instruction, so far as possible, to the certain or probable needs of the future—the needs which relate to physical welfare and business and social success—teachers so profoundly impressed with the dignity of their high calling that they will not themselves forget, and will teach their pupils to remember, that they have been born into the world to become governors, as well as citizens, of its representative republic. What teacher can be properly qualified for work involving responsibilities like these who has never had opportunity to ask and answer for himself under suitable conditions, such vital questions relating to instruction, as: What are its ends? and by what means are they to be attained? It was this study of the why and the how which crowned with success the labors of those who have won grateful recognition in their calling in the past, and upon such study, which must be largely based upon practical experience in teaching, will depend the success of those who are following in their footsteps. Where no opportunities for such study have been afforded, and its results cannot therefore be applied, education will wholly or partially fail in the realization of its highest ends. There will be found under such conditions something wanting, not only in the teacher, but that saddest of all results, a something wanting also in the pupil which no effort of his after life can fully supply, and which in thousands of instances foredooms to partial or complete failure those who have within them the possibilities of happy and useful careers. It was one of the best features of the academy, which has become so much a thing of the past, that it afforded full opportunity for the best development of the teacher's powers, and afforded to large numbers, if not to all, of the boys and girls in its vicinity, an education under the influence of teachers of high character and qualifications, zealous in their calling, and possessed of the powerful influence born of fitness for their work and devotion to it under

favoring circumstances, which made them an inspiration to their pupils not only in the getting of useful knowledge, but the development of noble and useful lives. It is one of the worst features of the schools which have displaced the time-honored academy, that they substitute for the conditions which made the academy so great a power for good, conditions fatal to the spirit of manly and masterful force which filled the teachers and inspired the pupils under the former system. The corresponding grades of our public schools invite larger numbers, but we may well ask the question: Do they, relatively, send into the world an equal number of noble men and women? This is a fair test of the success of the schools of to-day, and if they cannot meet it, whatever refinements in method have come in under our various "philosophies of education" to that extent they are a failure; and like the Shunammite woman sorrowing for the life gone out of her household, we may well cry aloud for an Elijah who shall give us back that which has been taken from us.

Eckermann reports that Goethe, while examining some engravings, said to him: "These are really good things; you have before you the works of men of very fair talents, who have learned something, and have acquired no little taste in art; still, something is wanting in all these pictures—*the Manly*. Take notice of this word and underscore it. The pictures lack a certain urgent power which in former ages was generally expressed, but in which the present age is deficient."

This remark of the German poet is forcibly quoted by a distinguished American orator, in application to the scholar of to-day.* "It is the want," he says, "of this urgent and resolute moral energy which makes many astute and accomplished politicians utterly powerless among the plain people. It is this want which more frequently than anything else deprives the cultivated preacher of religion of such commanding power as belonged to the mind less largely instructed but more elevated in spirit, who made pulpits famous a half a century ago. It is the want of such masculine energy which often makes conscientious students and dexterous writers as entirely ineffective when great interests are at stake and important issues are being decided, as their walking-sticks would be in the rush and clash of a cavalry charge. We have instances," he says, "on the other hand, of the power which comes through that interior and masterful energy, abundant and signal in our history, such as Dr. Arnold among educators, who gave almost the superlative example of force in its finest majesty and in its effects on other minds, and whose illustrious pupils caught from their master the spirit which glows through his writings like fire glowing in molten steel."

In the address from which we have quoted, Dr. Storrs indirectly touches upon a subject worthy of the profoundest thought. The urgent

* Address of Rev. Richard S. Storrs, D.D., at Union College.

power of which Goethe speaks, which was possessed by Dr. Arnold, Eliphalet Nott, and other great teachers, and which was reproduced in the persons of their pupils, stands for the expression of that which constitutes the highest fitness of the teacher, and which he must, in greater or less degree, possess, if the crowning qualities of manly intelligence are to find satisfactory expression in the lives of his pupils. Dr. Storrs graphically describes the scholar who is wanting in the qualities named by Goethe, as "a writer in whose pages beats no pulse, and whose finest passages have in them a moral inertness; as a man who eagerly aspires, but never achieves, and whose influence is perceptibly limited and languid as compared with his powers, and whose age is shrouded by a deepening sense of practical failure, and who passes out of the community which he seemed adapted to invigorate and guide, with no results and no remembrances to be a proud memorial of him." Of the men to whom this description applies, and of the teachers like unto them, and whose name is legion, we sadly repeat the words of the German scholar: "Something is wanting." It is the Manly—there is a lack of urgent power. With the dark vista of so many lives saddened by the consciousness that they have partly or wholly failed of the success possible to them, the grand fruitage of a life like that of Arnold is doubly suggestive. It points not only to what may be accomplished by one scholar who brings to his profession a high degree of manly force, but to the effect which the absence of that force will inevitably produce upon those subject to its influence; it suggests the grave question: Is not the want of manly force and forceful energy which foredoomed so many lives to comparative failure, in large degree due to the lack of these qualities in the teachers to whom we commit the intellectual training of our children? With due acknowledgment of the services of the qualified and faithful men and women who, in every part of our land, are shining examples of well-rounded manhood and womanhood, and whose influence is an inspiration to their pupils, faithfulness to truth demands the acknowledgment that tens of thousands bring to their work few of the qualities essential to success, and in the absence of which the embryo men and women whose plastic minds are subjected to their influence, at the end of their school years, so far as the teacher's influence is concerned, are sent into the world wanting in the high views of duty and obligations, the earnestness of purpose, the essential qualities of manhood which are the inspiration to noble lives and high achievements. It is vain to expect that the failures of the school will be atoned for by parental or home influences. Where the child fails to receive the impetus and inspiration in the direction of manly endeavor which the school-room as the introductory arena to the battle-field of life ought to furnish, he will seldom find it elsewhere. It is not to be supposed that those who turn to any calling merely as a temporary employment while seeking

positions more remunerative, or as a *dernier resort* after failure in other avocations, will bring to their work either enthusiasm or adequate qualifications. Such persons, if they "take up" teaching, as alas, so many of them do, by their perfunctory and inadequate service, will deprive the men of the next generation of the intellectual training necessary to fit them for the bearing of their burdens and responsibilities. But, in this criminal neglect of golden opportunities, whatever the responsibility of the time-serving and incompetent teacher, they are first and most largely responsible who shut the door against competent, conscientious, and zealous youth, by compelling those who enter the calling to accept for their services a reward so pitiful and meager as to make the teacher's life a promise of penury. It is to be remembered that just views of the wages question are to be based not on the conditions affecting the few thousand teachers in the higher departments of the more generously supported schools in our cities and towns, but upon those which affect the great majority of the two hundred and fifty thousand, or more, who teach, or undertake to teach, in the ordinary common school; and the statements which I make as to the effect of wages and tenure of office, under present conditions, upon this great majority, are by no means overdrawn.

## VI. Responsibility for an Inadequate Tenure of Office, and the Remedies.

In the system of training which hoplessly cripples, or brings to practical shipwreck, thousands against whose names may be written the sorrowful "might have been" of useful careers, whatever the responsibilities of home or teacher, it is evident that the chief fault lies in the short-sighted and narrow public policy which makes no adequate provision for the proper maintenance of teachers, offers few attractions to men of commanding ability, and gives no security for the tenure of office which brings to the teacher that development of his powers, which is essential to the best fruitage of our educational system. In all earnestness I express the belief that whatever the thought and labor which may be wisely expended upon text-books, methods of instruction, industrial training, and preparation of teachers, precedence should be given to the fundamental problem of how to bring the best talent to the work of public instruction, and how to keep it there. To break down the barrier in the way of the earnest and progressive youth who will not now enter upon the work, or enter only to turn aside; to place the profession on a parity with those more attractive, but which require not more of ability and devotion; to lift that which has become the least favored among pursuits to its true dignity as the noblest of them all;—these to-day are the first and highest duties resting upon the friends of education in

every State of our Union. Earnest men and women, anxious to do something for the amelioration of those not happily conditioned, who look compassionately upon those who struggle under life's burdens, trammeled by cruel chains, which their own hands have not wrought and are equally powerless to break, may well add to the laudable efforts put forth on behalf of these conspicuous unfortunates equal efforts for the remedying of an evil which not only cripples and dwarfs the capabilities of tens of thousands of young men and women who teach in our schools, but in the results of the unskilled and spiritless work of the incompetent, or the discouraged and poverty-pinched instructor, entails the curse of a deficient education upon hundreds of thousands in the next generation.

If we trace the causes which have led to the evils of which we treat, we shall find their roots chiefly in a degradation of the public mind which has resulted from the unhappy wedlock of politics and education, and has led to the surrender of our schools to the control of petty politicians whose highest views of duty and responsibility are measured by self-interest. Much of all this mischief has been brought about by the *argumentum ad hominem* as applied in matters of taxation. With this argument upon their ready tongues, district politicians have emulated each other in efforts to relieve the local tax-payer at the expense of the general public, until in multitudinous instances the local school tax has been reduced to the point of parsimony. This unwillingness to bear their just proportion of school support on the part of the towns, and the accompanying willingness of the States to partially supply their deficiencies, have brought the greater part of the schools of the country into a position in which no adequate, and in most instances, a shamefully inadequate provision is made for their maintenance. Neglect to properly provide for school accommodations, the maintenance of instruction for a totally inadequate period in the year, and the withholding of suitable educational appliances, under the niggardly sentiment thus engendered, are among the many counts in the burning indictment which may be framed against the present defects in our system—and which call loudly for their abrogation; but a single count in the indictment, the starveling wages doled to teachers, ought to be sufficient to secure the condemnation of the local greed which begets, and the State action, or inaction, which fosters this state of affairs. If the citizens of the older States of the Union may point with pride to the history of their common school systems, and may unite with their sister commonwealths in glorifying the possibilities of the future, the naked and staring facts which meet them in the present, in the districts of the rural towns from which the best blood of our nation—the material which has gone into its proud array of statesmen and scholars—has been drawn, should cause them to blush with shame. When parsimony in educational provisions is so universal as to

degrade the local majority under our Republican rule into a miserable machine which grinds out with grudging the farthing taxes of the town or district, and clutches greedily at the bounty of the State, we may not wonder that the men who are called to the high and difficult task of inculcating the lessons which shall fit our children for the duties of manhood and citizenship, are so often condemned to a wage rate which would arouse like paid hod-carriers to "a strike;" nor need we be surprised at the harvest of evils which is reaped in our schools.

While the absence of trustworthy statistics, which is in itself one of the faults of our defective system, makes it difficult at all times to secure accurate figures as to wages, the officials of the late United States census, with great labor, have been able closely to approximate the truth as to this important matter.

TABLE SHOWING AVERAGE AMOUNT PAID TEACHERS FOR A YEAR'S SERVICES, IN 1880.

| | | | |
|---|---|---|---|
| Connecticut | $363 00 | Delaware | $210 90 |
| Maine | 162 12 | Florida | 86 16 |
| Massachusetts | 532 51 | Georgia | 100 25 |
| New Hampshire | 158 67 | Kentucky | 133 10 |
| New Jersey | 406 64 | Louisiana | 217 79 |
| New York | 358 67 | Indian Territory | 367 72 |
| Pennsylvania | 232 35 | Mississippi | 119 37 |
| Rhode Island | 445 38 | Missouri | 209 31 |
| Vermont | 139 02 | North Carolina | 52 46 |
| California | 638 70 | South Carolina | 96 20 |
| Colorado | 393 29 | Tennessee | 106 88 |
| Illinois | 288 27 | Texas | 105 54 |
| Indiana | 266 69 | Virginia | 145 17 |
| Iowa | 227 25 | West Virginia | 126 83 |
| Kansas | 166 37 | Arizona | 561 82 |
| Michigan | 223 12 | Dakota | 156 37 |
| Minnesota | 187 56 | District of Columbia | 677 35 |
| Nebraska | 165 49 | Idaho | 259 08 |
| Nevada | 671 89 | Montana | 322 06 |
| Ohio | 294 66 | New Mexico | 170 74 |
| Oregon | 186 11 | Utah | 299 97 |
| Wisconsin | 224 42 | Washington | 179 66 |
| Alabama | 83 70 | Wyoming | 369 91 |
| Arkansas | 117 52 | The United States | 236 37 |

Based upon answers uniform in meaning, these statistics show that upon the basis of the whole number of teachers, regularly employed, and the whole amount paid for their services, the average amount paid for such services, under the boasted school system of our proud Republic, in the year 1880, was $236.37 per annum.

An analysis of the shameful facts so startlingly evident in this exhibit, shows a scale in which the average amount annually paid in hire to the

teachers of our youth (the custodians of the power which makes or unmakes a free nation), in round figures, descends from $677 in the District of Columbia to $532 in Massachusetts, finds its minimum in the New England and Middle States, in Vermont at $139, in the Western States rises to $631 in Nevada, and sinks to $135 in Nebraska; in the Southern States finds its maximum in Maryland at $367, and its minimum at $52 in North Carolina; and in the Territories descends from $561 in Arizona to $170 in New Mexico.

M. Emile Lavelaye, in a recent work, gives the average annual salaries of teachers in Europe, as follows: England, teachers holding certificates, $500; Wales, $390, teachers without certificates, $240 to $310; Scotland, teachers in the Presbyterian schools, an average of $345, female teachers holding certificates, $310; Denmark, $430 to $675; Berlin, $342.50, after six years of service $375, after nine years $450, after fourteen years $492.50, after twenty-four years $560; in Alsace-Lorraine, $240 to $300. And in comparison with these figures in the year 1880, we turn to the pitiful figures $236.37, as the average payment for a year's hire paid to the public school teachers of the United States. This exhibit, more eloquently than any words, points to a condition of affairs which, so long as it exists, will continue to be an insuperable barrier to the elevation of the standard of instruction in our schools, and the clothing of the teacher with either the dignity, emoluments, or qualifications which should belong to him as a member of a profession second to no other, and the parent of all. While our teachers, for the services of a year, receive less than the average amount paid for similar services under "the effete monarchies of Europe," and even less than the amount paid in the same time to the laborers upon our railroads, or the breakers of stone upon our highways, what right have we to expect, in them, the splendid abilities which adorn and give luster to the professions of law, medicine, and theology? or what reason have we to ask why teaching is in contempt as a profession? That our schools have maintained, under these conditions, a standard as high as that now existing, and that they have not sunk to the low level of the sentiment which has for years permitted and abetted this legal robbery of the instructors of our children, is due neither to the wisdom of the American people nor the legislators who have made, or mis-made, our laws. For whatever of good we have in our schools to-day, for whatever of noble fruitage comes from them for the benefit of the nation, we are indebted chiefly to the patient self-sacrifice, the high devotion, the oftentimes heroic labors of the true men and women who, in spite of every discouragement, regardless of ill-requited toil, with the spectral figure of poverty walking ever beside them, deprived all their days of many of the simplest of the luxuries which add to human happiness, have nevertheless, in love for their chosen work, and love for children,

with a God-given inspiration, taken up their burdens day by day, and borne them without complaint, nay, with cheerfulness, until from the schools of earth they have gone to that where all are pupils and Christ is the Master. That so large a number of such have, under the circumstances, devoted themselves to the work of teaching, is one of the grandest illustrations of the spirit which leads men and women, in faithfulness to the highest views of duty, to dedicate their lives to noble services of patriotism—the spirit which is developed and made a part of true manhood and true womanhood under the workings of our American institutions, and which is self-perpetuated in just such lives as these. But while this display of high virtue commands our admiration, is there not something pitiful in it as we trace the journeyings of weary feet through thorny paths, in the midst of labors so little appreciated and so miserably requited? Is there not in this spectacle of unmercenary and unselfish devotion to simple duties in humble stations, something to shame the mercenary spirit which so largely dominates among the prosperous thousands who share in its benefits? Are we not convicted of inconsistency when with one hand we generously provide for sufferers by plague, flood, and fire, and with the other withhold the just reward of the faithful servants who toil at our gateways for the erection of the intellectual and moral safeguards which are the only guaranties of the security and safety of the nation and the protection of our homes?

Recognizing our duty in the premises, the question is asked, What are the steps necessary for its discharge? I reply, (1) first of all, let those who fully realize the necessity of the reform organize for the work of bringing to bear in every State in the Union the influence of the intelligent public sentiment which shall compel our legislators to wipe from the statute books the mischievous enactments which make so many teachers the helpless servants, or mere puppets of incompetent school officers, petty politicians, and men of like character; and having done this, (2) let the appointing power be placed in the hands of men of high intelligence, who are beyond the reach of the temptations which lead to a base use of office, and who will be not only safe custodians of the school interests, but the most efficient and friendly aids and counselors of the teacher. When this has been done, (3) let our legislators, to the extent that they are the grantors and custodians of school funds, demand as a condition to the bestowal of these funds, the compliance of local tax-payers and local school officers with such statutory provisions for the support and retention of competent teachers as shall make the calling inviting, and as shall secure a remuneration justly proportioned to the character of the services rendered. (4) As the most important means to these essential ends, the absolute control of our public schools in every State may be placed in the hands of State boards whose members have been chosen, in part, by vote of the certificated

teachers of the State ; for co-operation with these boards, county boards may be chosen in like manner, and to the members of these county boards subject to the review of the State boards, may be committed the supervision, examination, and appointment of teachers, and the determination of their compensation. To determine the standard of teachers' qualifications, the methods for their examination, and the methods of school conduct ; and to adjust, upon some established legal basis, such, for example, as a scale based upon the value of taxable property, the salaries of teachers, the State and the county boards may meet in yearly convention, under statute provisions which shall prescribe the scope and limits of their authority, and which shall give to their decisions the force of law.

When the alliance of politics with education, a wedlock as hateful and unholy as that of Church and State, shall have been severed by the adoption of these, or wiser methods, and the interests of education are permanently committed to the custody of its truest and most enlightened friends, then will the teacher's tenure of office be secure, his remuneration be adequate, and the way opened for the ennoblement of the teacher's profession, and for whatever may be essential in order to the provision of the fullest opportunity for the best possible education for every child in the republic.

## *TEACHING AS A BUSINESS FOR MEN.*

BY C. W. BARDEEN, SYRACUSE, N. Y.

To the subject as assigned me I have taken the liberty to add the words "for Men:" partly because as thus limited the subject is quite broad enough for a half-hour's discussion; and partly because, to make my point of view distinct, I desire to approach the question in the attitude of the young man just graduated, who has a natural inclination toward the work of a teacher, and is looking the field over to decide whether it will pay.

Let us suppose a case. Here is John Doe, freshly B.A., a young man of good health, high character, accurate scholarship, social culture and tact, shrewd, determined, persistent, enthusiastic—in short, a man bound to stand in the higher ranks of any vocation he may select. He comes to me for advice as to choosing a profession. He has been fortunate enough to recognize his indebtedness to one or two superior teachers, and he thinks he would like to send out a few young men every year who would feel that way toward him. So, without looking upon it as a matter of duty, he is inclined to become a teacher; and he asks my advice as to whether it is, from the worldly-wise point of view, a desirable choice. The real question in my mind and in his is this: Ought teaching under present conditions to command the services of first-class young men?

"Well, John," I say, "tell me some of the advantages you think it holds out."

"Why, in the first place," he replies, "I suppose one is tolerably sure of a living."

"Ahem! possibly," I say. "That depends upon what one means by a living. If you mean existence, Yes. If you mean the leisure and the money to develop your possibilities on all sides; to surround yourself with the comforts and conveniences of modern civilization; to command the resources of literature, and the companionship of great men; to see and hear at will all that is noblest in nature and in art, that your standards may be the highest—decidedly No."

"But teachers get good salaries," he urges.

"Poor teachers do. Third and fourth-rate men are overpaid in this business as nowhere else. But first-rate men have no opportunities. Dr. Wickersham, of Pennsylvania, has been looking up this matter, and he says there are only ten teachers and superintendents in that State who

get $2,000 a year; that in Lancaster the superintendent of schools gets $1,500, and the overseer of the cotton-mill, $8,000; that he has known a lawyer to exact a fee greater than any teacher's earnings for five years, while a doctor may obtain in an hour a sum that most teachers cannot gather in a lifetime."

The young man sighs. "I suppose I shall have to be economical," he says, "but at least the teacher is a man of influence and social position."

"Indeed?" I reply; "that is not the usual opinion entertained even by teachers themselves. Here is part of an editorial from the *New England Journal of Education*:*

"A teacher is respectable; but when you have said that you have stated all that the mass of people will allow concerning him. He is respectable in the same way that a good book is respectable; valuable for what it contains, but still an inanimate object, something that cannot enter into the active struggles of life, something to be taken down at pleasure, and at pleasure shelved; valuable chiefly in the fact that, though learned and wise, and perhaps witty, it must yet, on all occasions, keep perfectly still. . . . The world looks upon the school as the grown man would regard his swaddling clothes, and upon the teaching profession as a sort of colored mammy, a thing deserving affectionate treatment, and yet a silly old institution after all. "How's school?" is the constant greeting to the teacher, and he is vain enough to imagine that there is some interest or sympathy in the question, and usually garrulous enough to run on with the tale of his petty troubles and triumphs, imagining that the smile of amusement or contempt worn by his auditors is one of sympathy and appreciation."

John looks gloomy. "At any rate," he says, "I shall be regarded as a professional man."

"You may be by district-school teachers who sign their letters 'Prof. Richard Roe.' But the leaders of the profession do not think so. The first point made by C. O. Thompson before the American Institute of Instruction in 1867, was this: 'There is no recognized profession of teaching'; G. Stanley Hall began his paper before the Department of Superintendence, in 1882, on chairs of pedagogy, by a reference to the brief chapter on snakes in Ireland; and James H. Hoose, in a paper before the New York State Teachers' Association in 1872, on the term Profession as applied to teaching, said that the science of teaching had no maxims, no customs and established usages, no positive subject matter codified, no common theory of nature, no examinations or removals by the fraternity solely, no established rules of practice, no systematic code of principles, no bodies to supervise rules—in short, none of the bases upon which a profession is founded.

* xi. 395.

"Make a single application. Nothing is more distinctive of a profession than that its right is recognized to determine its own membership. Yet, who ever heard of a board of examiners composed of teachers? A bright woman wrote to the Ohio *Educational Monthly*:*

"I was examined in the great and glorious Commonwealth of Ohio for the first time about three years ago. The Board of Examiners consisted of a preacher, a doctor, and a lawyer. The following are some of the marks:

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| Grade, 1st class. | Orthography, 10. |
| Reading, 7. | Arithmetic, $9\frac{1}{2}$. |
| Theory and practice of teaching, 10. | |

"I could not understand, neither can I yet fully comprehend, how I could teach ten when I could only read seven. It is hardly just to certify that a teacher is first-class when she can only cipher nine and a half. The Association said we must exalt our profession, and if we are first-class, let us be first-class all the way through. I do not consider teaching a profession. I regard it as a business—not a very profitable one, but a very honorable one. It may be, if we should make the attempt, that we could exalt the business into a profession. If not, we might bring the professions down to our level. The doctor's certificate might be made to read:

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|---|---|
| Measles, 10. | Typhoid fever, $6\frac{1}{2}$. |
| Cholera, 3. | Theory and practice of medicine, $9\frac{1}{2}$. |

"We all know that there are good and bad lawyers, and we might grade them something like this:

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|---|---|
| Criminal Code, $7\frac{3}{4}$. | Divorce, 10. |
| Real Estate, $3\frac{14}{15}$. | Theory and practice of law, $9\frac{39}{40}$. |

"It would never do to assert that there are good preachers and bad preachers, but we may say there are a few poor preachers, and if any one is offended we can explain that poor means lean. Their license might be filled out:

| | |
|---|---|
| Election, 8. | Repentance, $6\frac{3}{4}$. |
| Eternal punishment, 10. | Conversion, $7\frac{3}{11}$. |
| Theory and practice of religion, $5\frac{1}{2}$. | |

"I forgot one important matter. These papers ought to be good for one year or two, according to the grades, and only in the county where issued."

* xxx. 428.

And not even yet is John discouraged. "I may not get money or fame," he says bravely, compressing his lips; "I may not even command the respect due a professional man. But at least I can give my life to making better men and women. I will study the problem of education, evolve my principles, apply them with fresh differentiation to every pupil, watch the development of the child that enters a primary room, into the young man that goes out into the world better and truer and wiser and more useful because part of my heart and life have entered into him."

"You mean you would if you were permitted to, John. But you must remember that the principal of a school is hired by, and directed by, a board of education. In the first place, you have got to secure a position; and in interviewing a board of education with reference to your first engagement, you are not unlikely to encounter some unexpected phenomena. When you are in you have got to keep in. Your engagement may be only during the pleasure of the board, and at the best is but for a year. A single member of the board, whose interference you have resented or whose child you have slighted, may defeat your re-election; and your system, which a first year can hardly have developed, not to say put into operation, must be thrown aside when you encounter the new problems of another school.

"Even if by an intelligent or indifferent board you are allowed to remain, you are hampered by restrictions that would be scouted by strictly professional men. Who directs a minister how he shall preach his sermon, a lawyer how he shall conduct his case, a physician how he shall compound his prescription? But a teacher works under a course of study and a scheme of regulations adopted by a board of education. He is to be at school twenty minutes before the hour, to stand in the entry during recess, to report all cases of discipline for approval, and to use text-books adopted without reference to his opinion by men ignorant of the very subject matter. Gail Hamilton says that a member of the board of education in Washington objected to consulting teachers regarding text-books, on the ground that it was not dignified for employers to consult those they employed. How would you like to develop character under such supervision as that?"

"But surely you will admit," urges John, "that many noble men are teachers. How did they come to choose this business, if it is so unattractive?"

"They didn't choose it," I reply; "they chose something else to which teaching was to be a stepping-stone.

"'Where is there a man among us,' says the *Schoolmaster*,* 'from superintendent down, who began to teach with the distinct purpose of making that a life work? Find him and he will be one in a thousand.

* ii. 114.

We have drifted into the business, and we have not and cannot drift out of it.'"

"Truly, O Socrates," says John, "it seemeth that I should consider further before I adopt a profession."

"O Alcibiades," I reply, "your head is level."

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Fellow-members of this Association, the truth is not to be spoken at all times, and at these meetings you do not always speak it, the whole of it. But the subject assigned me by our President calls for a practical, hard-headed statement of facts. Have I not presented the case fairly? Would you—with the exceptionally fortunate experience that has attended most of you—would you advise a young man of superior ability to become a teacher? Do you want your son to settle down to teaching as the work of his life?

I yield to no one in my appreciation of the joys of teaching. The happiest work I ever did was in the school-room. As I write, my eyes suffuse when I recall the class that graduated thirteen years ago at a village school a few miles north of here, and remember the loyalty, the trustworthiness, the confidence of those boys and girls, who were rather companions than pupils. But my salary was proving insufficient, and an opportunity to engage in other business came to me just as I was chafing under restrictions upon my work, slight in themselves, but significant as showing by how indifferent a touch the board of education may topple down the foundations the teacher is building upon. And so, after six years' experience, I gave up teaching; and I have never regretted it. Indeed, I have wondered sometimes how a man with ability to succeed at anything else should continue to be a teacher. Under its present conditions, the business of teaching deserves to command only third-class talent; and the fact that some of the men whom this Association assembles are by their own assent teachers might be looked upon as an interposition of Providence in behalf of our children.

These things ought not so to be; they are not always so to be: how long depends much upon how clearly we recognize the causes, and with what unity we strive to overcome them.

The usual appeal of the daily newspaper or the public orator is for higher salaries, as though a legislative enactment raising the compensation of teachers 50 per cent. would raise the quality of their work in the same proportion.

To experienced teachers, especially to those accustomed to read and to write upon this question, the fallacy of such an assumption need not be pointed out. There are at the present time hundreds of good teachers ready to be engaged and to do the best work of which they are capable at the salaries now paid. And they cannot get places because of methods of

appointment, especially in cities, that give such places to persons whose chief recommendation is that they are unqualified to do anything else.

"Pat," said one Irishman to another, as they paused from ditch-digging to mop their brows, "Pat, what business would you like best if you had the choosing of it?"

"Why, for a nice, dacent, clane bit of worruk, I think I'd like to be a Bishop."

And so because teaching is to the incompetent "a nice, dacent, clane bit of worruk," they are lifted into it by those who otherwise would have to support them. Raise salaries one-half without raising the standard of qualification, and not only do you fix more firmly than ever in place these relatives of the board and friends of local demagogues, but you turn the hungry eyes of politicians toward places not now considered fat enough to be worthy spoil, and displace some of the best of the teachers you already have.

"The wages paid by the community for teaching in our public schools," says the Hon. S. M. Clarke,* "are ample—are prodigal in some cases—to youth and inexperience. They are scant and inadequate to age and experience. But—save exceptionally—supply governs price. Since the public—the demand—is satisfied with youth as a teacher, and the supply of youth for teaching is so abundant that every school board in the land is worried with an excess of applicants, that will inevitably fix teaching wage, and the level of it will be youth's wage. Men and women who give their lives to teaching must confront that grim and disheartening fact."

A project supplementary to arbitrary increase of salaries, is that of Pensions to retired teachers. Here there is among teachers some discussion,† though I should judge the weight of opinion was manifestly against them.

The objection just urged applies with even stronger force against this innovation, since the incompetent who have flocked after the places where they could get pay for very little work, will clutch after them the more greedily when there is attached to them the possibility of pay for no work at all.

But there is another consideration. Already the most discouraging feature of the profession is that the teacher is looked upon as an impractical man, useful enough to take care of boys and girls under rules established by lawyers, doctors, and business men, but unfitted for participation in any of the serious work of the community. I remember reading of a school-house dedication, where at the very close of the exercises, after the audience was wearied by speeches from butcher and baker and candle-

* *The Schoolmaster*, Chicago, iii. 125.

† *Indiana School Journal*, xxvi. 339.

stick-maker, the chairman remarked benignly: "We desire that at this festival of rejoicing all classes of the community should be represented upon the platform, and *therefore* we will call upon the principal of the school for a few brief remarks." Indeed, a western normal school recently proposed to appoint as principal some thorough-going and successful business man, one of brains, but wholly free from pedagogical superstitions, who should introduce life and spirit and business methods into the school.

"Savans and donkeys to the rear," was Napoleon's order in Egypt.

For this conception of our calling we are much at fault. Listen, for instance, to this proposition by Adolph Douai:*

"The teacher ought to be a pensioner of the State; every care for his existence should be taken from off his mind. He should be spared every indignity of a dependent condition, every struggle for existence, in order to belong to his calling exclusively, and to embrace it with devotion."

This is making teachers not merely babes but intellectual eunuchs. It is manhood in the teacher that commands respect, and makes men of his scholars; and what sort of manhood is that which cannot contract its own bills and pay them and lay by something for a rainy day? The word "pension" suggests a physical cripple; but he is an intellectual hunchback who embraces a profession in youth with the hope that in old age he may be permitted to sun himself on the veranda of a State poor-house.

I know that pensions are paid to retired judges, as well as to crippled soldiers; and when the occupation of teaching ranks with that of judges, and our salaries correspond with theirs, we may be able to receive without self-reproach what will then be a pension liberal in amount. The man who would not care to hold out his hat on a street corner may accept with beaming satisfaction a "testimonial" from his fellow-citizens. But with salaries as they are and teachers as they are, the man who drew his pension would look like a beggar—and feel like one.

Without discussing the question of Tenure of Office, I would merely suggest that in this effort we are asking what the well-paid officers of corporations do not find necessary. The bank-teller and cashier hold office only for a year; and they are usually re-elected—if they are still this side of the St. Lawrence. The insurance-president, the cotton-mill superintendent are subject to annual election; but it seldom worries them. The fact is, in all such positions the man knows that he is practically indispensable, and his confidence rests on that assurance.

Now why should not the teacher make himself indispensable in the same way? The answer is easy. The board of education does not know how to measure his work, as a board of directors knows how to measure the work of a bank-cashier or a cotton-mill superintendent.

* In *New England Journal of Education*, xii. 228.

For instance, perhaps no theory of education is more thoroughly established than Jacotot's of masterly inactivity. The teacher is most useful when he is seemingly most useless. The little boy who couldn't do his problems, and didn't see why he needed to learn because when he was a man he would be a teacher and make his scholars do 'em, hit upon a great educational principle.

But what would the average member of a board of education think of it? You know the story of the petroliarch who hired a string-quartette for his daughter's reception. Passing by, he observed that one of the violinists was not playing.

"See here, mister," he said, "what's the matter with you? Why aren't you at it?"

"Why, sir, I have a sixteen bars' rest here."

"Rest? at three dollars a night? Not if I know it; you start that fiddle!"

So the average member of a board of education sits beside the teacher and sees a class come in listless and indifferent, sees them march back to their seats half an hour afterward, brimming with life and enthusiasm, reflects that they are bright children, if his boy happens to be among them, but declares the teacher has the easiest work he ever saw—nothing to do but sit still and listen. He never dreams—how should he?—that the life and enthusiasm these thirty scholars carry away have been drained out of the teacher as positively as his blood would be drained by a vein-opening. In reverent imitation of the great Master, the true teacher may say at the close of school, "Virtue has gone out of me." But it has gone out unobtrusively, perhaps unconsciously; and this quiet, observant, sympathetic teacher, who has poured out his heart's life for his scholars, may be displaced by a brawling braggart who will make more impression because he makes more noise.

And this leads to what seems to me more important than raising of salaries, or establishment of pensions, or lengthened terms of service—and that is, Discrimination in Employment.

"These, then," says President Eliot,* "are the three main features of a well-organized public school service: Careful selection of teachers by examination and probation; ultimate appointment, without limitation of time; and a system of retiring annuities."

All I ask is that reforms be attempted in this order.

I can only hint at some of the immediate steps we might be taking.

(1) Teachers should discriminate among themselves, and against themselves. I do not at this moment remember conversing with a teacher about a contemporary teacher superior to himself. It is amusing to one whose attention has been called to it, to notice how inevitably inquiry

* *New England Journal of Education*, xi. 20.

about a fellow-teacher leads the speaker to comparisons favorable to himself. The nightingale has a tolerably smooth voice, but somehow it lacks breadth.

Now there are lawyers who will admit that they have their superiors at the bar. If Mr. Evarts were stricken with paralysis, all the young attorneys in the country would not jump upon the train and rush to New York to apply for his position. A good many of them would be fully aware that they could not fill the place.

(2) Teachers should be men among men, with nothing in their dress or their manner or their conversation to indicate that their functions are limited to the school-room.

I was urging one of the normal principals in this State to forward a certain matter before the Legislature, on the ground that he was so free from the external characteristics of the pedagogue that he could meet the members on a level, and not be considered as an impractical visionary.

"Yes," he said, "I had evidence the other morning that I am not recognized at forty rods as a teacher. I had been riding three or four hours on the cars, and the limited accommodations at the Brackett House did not enable me to remove all the cinders. I sat down to be shaved and the barber began his orchestral accompaniment by inquiring where I had played the night before."

"Played?" I repeated.

"Why, yes," he said; "don't you belong to Cal. Wagner's minstrel troup?"

There are men in the profession, who, if they saw themselves as the public looks upon them, would take it as a compliment to be mistaken for a nigger-minstrel.

(3) The difference in the results of good teaching and poor teaching should be proved and emphasized and illustrated. It is a common assumption that the cost of educating a child is the cost of his tuition; hence that if one teacher at $1,000 a year accomplishes half as much with fifty boys as another at $2,000 he is as cheap, and it becomes a mere question of the quantity one cares to purchase. But as a matter of fact the tuition is as subordinate an element in the public school as it is in the private school. The board and clothes and general care of the boy should be reckoned as part of the cost of his education; and when these are estimated it becomes a question of $16,000 as the cost of educating under one teacher, against $17,000 under the other, with twice the results.

"We think there is no exaggeration in saying," reported the Committee on Normal Schools to the New York Legislature,* "that a teacher who understands the business will accomplish more in a year than is accomplished in three years under untrained instruction." Suppose she

* Report, 1879, p. 41.

is an intermediate teacher at $300 a year, with fifty children under her; and that a competent teacher could be secured for $500. Then estimating the home expenses of each child at $300 a year, the cost of securing the same amount of education is in the case of the incompetent teacher $45,900 as against $15,500 in the case of a superior teacher.

Nor is this the measure of the extravagance of hiring poor teachers. The old Greek musician charged double price to those who had taken lessons before coming to him—one-half for correcting bad habits. It is questionable whether the bad habits formed under an incompetent teacher can be eradicated at any cost of time and money. Your scholars might better have been pupils of Mr. Wopsle's great aunt, "who kept a school in the village; that is to say," as Dickens puts it, "she was a ridiculous old woman of limited means and unlimited infirmity, who used to go to sleep from six to seven every evening in the society of youth who paid two pence per week each for the improving opportunity of seeing her do it."

Nor is it a question of mental loss alone.

Describing the effect of an incompetent teacher, the *National Teachers' Monthly* * said some years ago:

"Ere long the unconscious parent is pained and startled by the intelligence that the child is no longer doing well. He is warned that he has been absent. The influence of evil associates, unperceived by the careless or stupid teacher, or neglected, has overpowered her influence, notwithstanding the immense advantage on her side, and truancy and other moral delinquencies ensue. The bright, gentle, confiding face which was entrusted you by the hopeful parent loses its innocent, cleanly look, and dirt and wile and sullenness overspread it. Correct deportment is despised, and good scholarship loses its attractions. He has entered an atmosphere where disobedience, insubordination, and rebellion are rampant, and the time and strength that should be devoted to unfolding the mysteries of knowledge are enlisted in a harsh and hopeless struggle to maintain an odious and barren discipline."

"A weed," says Emerson, "is a plant whose virtues have not yet been discovered." There are weeds in every school-room that the indifferent teacher neglects or casts into the highway, to become desperados and criminals. There are teachers who would recognize strength under the rudeness of such natures, and transform them by sympathy and culture into pillars of the school and of the State. Do you think the public could afford to make a hundred dollars' difference in the salaries of two such teachers?

(4) There should be less development of elaborate systems, and more recognition of the personality of the teacher.

* ii. 1.

"Education is a dynamical, not a mechanical process," says Dr. Arnold, "and the more powerful and vigorous the mind of the teacher, the more clearly and readily he can grasp things, the better fitted he is to cultivate the mind of another."

"Few people realize the fact," says President Eliot, "that there can be no good teaching without a quick sympathy and perception in the teacher, and a strong personal influence going out from him."

Canning summarizes, when he says it is not the harness but the horses that draw the chariot.

"I do not care what you study," says Emerson, "I only care to know who is to be your teacher."

Said the *Century:* "The minister of public instruction who boasted that he could look at his watch and know just what question was being asked in every school of a given grade in France, was a good illustration of a system-worshiper."

Another writer has said: "A school committee hires a superintendent, and then thinks it can safely employ an inferior class of teachers, just as an inferior class of laborers may safely be employed for digging or sweeping if a smart overseer is hired to watch them. . . . Now a gain in superintendence which is procured at the expense of a loss of direct teaching power is too dearly bought. The reason of this is contained in a self-evident proposition which all people admit on its bare statement, and yet too often lose sight of. A good school is not a grand building, or a nice set of furniture, or a series of text-books selected by a committee, or a programme of studies made up by the superintendent; and all these things put together, though each were the best of its kind, would not make a good school; for a good school is a man or a woman."

The system, however complete, can give only the general principles. The indispensable individual application to each pupil can be made only by the discriminating and sympathetic teacher.

The line between amateur and professional work may be drawn through just the point where the teacher recognizes that his study is not of the subject-matter but of the class.

A lecturer was once asked if he did not find it wearisome to repeat the same anecdotes night after night. He replied that for the first two or three times he delivered it, he enjoyed his lecture. Then it became for a dozen nights commonplace and tedious, and he dreaded to begin it. But by this time it was familiar to him, and he began to turn his attention from the lecture itself to the audience as affected by it. This always proved an unflagging source of interest. As he approached a humorous or a pathetic climax, he began to wonder whether it would be appreciated, and he learned to experiment upon expression and emphasis to see just what was surest to capture the particular audience before him. When

this stage was reached, he was sure of quite as much entertainment from the audience as they could get from him.

This is the attitude of the professional teacher. He does not complain languidly that he is tired of teaching arithmetic because he knows all about it. He may know all about addition of fractions, and what are, on general principles, the best methods of teaching it, but he does not know till he experiments just how much addition of fractions will strike the mind of Tommy Jones. The recitation teaches him nothing new about fractions, but it teaches him a good deal about Tommy Jones.

Now that is a sort of study the system cannot provide for. "The teacher may adapt methods but should never adopt them." "The man who would translate a book out of one language into another must know both," and the teacher who would put ideas into a child's mind must know the mind as well as the ideas. "It is not by his own taste but by that of the fish, that a sportsman baits his hook," says Macaulay, and the teacher will present his subject not as it would be clearest to himself, but as experience and observation show him will be clearest to this particular pupil.

"To be able to find out the peculiar constitution of each child's mind," says Richter, "so as to bring what you would teach down to the level of its understanding, and yet to make it work in such a way as to seize upon and comprehend the subject and reproduce it—this is teaching; and nothing else deserves the name."

Such considerations I would urge upon the public, in conversation, at Associations, and in those educational columns of local newspapers that principals should seek to secure and control. Especially would I avoid assuming at these Associations any attitude that makes examinations less severe, position less dependent on results, simple incumbency more secure. By etymology, the sinecurist is long-lived, and if we wait for the lymphatic ins to die off, young and vigorous outs will stagnate for want of opportunity.

I do not quarrel with Life-Tenure, or even with Pensions, provided we can first be assured of what seems to me an indispensable pre-requisite to the beneficial working of either, viz., that the work of superior teachers be recognized and secured. I do not ask that only competent teachers be hired;—in fifty years, under the most favorable conditions, we shall not have enough competent teachers for our schools. I do not ask even that the average teacher recognize the demands his work makes upon him, or try to meet them.

But I do ask that the teacher who is competent, who does recognize these demands, and who does meet them, shall no longer be compelled to contend for a position on equal terms with a beardless lad from college, or a sole support of a widowed mother, or a woodman-spare-that-tree old

fossil whom the committee are too tender-hearted to turn out. There are a few men who love teaching, who were born to enlist the sympathy of children, and who devote their lives to study of a science of which the art is so delicate and the results are so momentous. Show these men the same recognition that is shown physicians, and lawyers, and clergymen, by asking, not what shall be the salary, but, where can we find the man?

To put it briefly, the fatal flaw in our status as a profession is that the average school-board is a checker-board. In playing draughts the only important consideration is that the square be covered. If a man rolls to the floor out of reach, another will do as well, or a penny or a button will serve—anything to show that the place is not empty. And so if a principal resigns, why, anybody will do that can sit in the chair without being put out by the big boys—your cousin, my nephew, this graduate who wants to earn money to pay his college debts.

Now suppose we could convert our school-boards into chess-boards. When a knight falls to the carpet you do not replace him by a pawn, or a rook by a bishop; and you will make almost any sacrifice to retain your queen. One of these pawns may sometime be a queen, but not till by long probation and many steps of progress she has won her position in the queen's row.

There should be a Queen's Row in teaching, and all the steps of progress toward it should be definite and certificated.

Then, and not till then, the Teacher's Business will become the Teacher's Profession.

# THE APPRENTICESHIP QUESTION AND INDUSTRIAL SCHOOLS.

BY THOMAS HAMPSON, WASHINGTON, D. C.

A FEW years ago the writer visited the room of the Supervising Architect's office, at the Treasury Department in Washington, in which the models for the sculptured ornaments of public buildings throughout the Union are prepared. Remarking the foreign air of the men he saw at work there he asked the gentleman in charge, a Frenchman by birth, how many Americans were employed. "Only one, the laborer," was the reply.

The fact just stated affords an illustration (though, of course, an extreme one) of the predominance in this country of artisans of foreign birth and education in those branches of industry into which art enters as an element. The men at work in that room had been trained in the technical schools of the different parts of the Continent of Europe, from which they had come to do work of the kind on which they were then engaged, and, although unacquainted with the language of the country in which they had come to live, had nevertheless readily secured remunerative employment. At the very time they did this their official superior, the Secretary of the Treasury, was daily rejecting scores of applications for small pay clerkships from the native products of our schools and colleges.

In France and Germany, from which a majority of these men came, the fact that apprenticeship virtually ceased years ago has been recognized and the void its disappearance made has been filled by the technical school. In the United States, where the decay of apprenticeship has been even more strongly marked, nothing has been agreed upon to replace it; and while, through the daily extension of machinery to new branches of industry, a specially trained head and hand are becoming more and more needed, this need is not distinctly felt, much less satisfied. In short, to provide ourselves with the vast army of workmen we need in order to compete successfully with foreign nations almost our sole reliance is still placed on apprenticeship. It may, therefore, be reasonably asked:

(1) Does apprenticeship, as actually in vogue among us, provide a sufficient number of skilled mechanics to satisfy our industrial needs?

(2) If it fails to do this, does the system admit of such modifications or extensions as will enable it to provide such a sufficient supply?

(3) If each of these questions must be answered in the negative, with what shall apprenticeship be replaced?

1. It will conduce to clearness, I think, if we first glance at the history of the institution itself, especially in England, whence both our laws and customs respecting it have been mainly derived.

When apprenticeship began is unknown, but the system unquestionably closely followed the formation of guilds, which is generally referred to the twelfth century. In the fifth year of the reign of Elizabeth (1538) the customary period of apprenticeship, seven years, was made compulsory, and no person was permitted to exercise any trade or profession without having first served for that length of time. This act of 5th Eliz., c. 4, remained on the statute book, being materially amended at various times, until the fifty-fourth year of the reign of George III (1814), but two circumstances had long greatly diminished its importance before its repeal at that date. One of these was that the judges before whom it came for interpretation had placed a strict construction on it, and, following the maxim of the common law that trade is to be encouraged, and considering the act a restriction on trade, would allow it to apply to no trade not in existence at the time of its passage. Among the many absurd anomalies to which this gave rise one may be pointed out. The trade of a wheelwright was protected by the act; that of a coachmaker, having arisen subsequently to its passage, was not. It was therefore held that, while the wheelwright would be protected against infringements of the coachmaker, who would not be allowed to make wheels, the wheelwright might himself make the whole of a coach. The other circumstance referred to as limiting the field of operation of the act was that the number of trades that had grown up since its passage, and were therefore unaffected by it, was very large, and some of these had risen into the first importance; for instance, the extensive textile and iron industries of Manchester and Birmingham it hardly touched. But while apprenticeship had thus generally ceased to be required by law, it had not ceased to be customary, and in England, down to the present time, the term of apprenticeship has generally remained seven years as before.

Legislation in the several States of the American Union has varied from that of the mother country in failing to make apprenticeship a condition precedent to the pursuit of any trade, and in omitting to fix a minimum time for the existence of the relation; but in other respects it has rarely done more than re-enact the common law and provide tribunals for the settlement of differences arising between masters and apprentices which should be more expeditious and less expensive than the ordinary courts. The period of apprenticeship customary in the United States has been and continues four years, although it used occasionally to be seven and is now not unfrequently three. In a very large majority of cases probably, verbal agreements have been substituted for the indenture contemplated by the statutes, though such agreements at the common law, and generally by

express statutory enactment also, are incapable of legal enforcement. Even where written agreements have continued to be relied on, a number of large establishments have had their apprenticeship blank forms drawn in such a way that the employer may easily evade his duties as master. This baneful practice is facilitated by the requirement, common in the State laws regulating apprenticeship, that an indenture which does not conform strictly to the statute will be void.

It would be easy to show by citations from authorities that the apprenticeship existing among us as briefly outlined utterly fails to supply an adequate number of proficient artisans for our extensive and growing industries, but it would be tedious. I think it will be sufficient to mention a few general considerations tending to show that the system must so fail, and rely for further confirmation on the personal knowledge and observation of my hearers.

The first and most important of these general considerations is the almost incredible subdivision of labor practiced in the most flourishing of our modern American industries. An example will readily illustrate this. At the Paris Exposition of 1878, the writer saw hand-made watches from a Swiss apprenticeship school which a boy was able to make alone in the last year of his course. In the manufacture by machinery of the Waltham watch there are about 1,000 distinct operations, there being eighty-four on the balance-wheel alone, almost every one done by a machine. He is a rare mechanic nowadays who makes the whole of an article. Labor-saving machinery has largely driven out handwork, and the industrial shrewdness of manufacturers has led them to divide their employés, boys as well as men, into sections occupied exclusively and continuously with only one part of the work. Under these circumstances a successful manufacturer feels that he could only receive apprentices by turning his lucrative shop into a charity manual labor school. It is not at all singular therefore that from the purely business stand-point of the large manufacturer boys should be denied admission to their works until nearly of age or excluded altogether.

The subdivision of labor, then, I take to be the chief cause of the general decay of apprenticeship, but it has been greatly strengthened by two circumstances which, while important everywhere, are of peculiar weight in this country.

One of these is the strongly-marked tendency in the legislation, judicial decisions and customs of the present day, to substitute contract for status, the tendency to ignore the privileges hitherto enjoyed by various classes, and place all individuals on the same footing. The tendency adverted to is by no means new; but however long it may have been operative, there is no doubt it has been greatly accelerated of late, and the

transformation our customs respecting apprenticeship have undergone affords a most striking illustration of it.

It is involved in the original idea of apprenticeship that the boy should form a part of the family of his master; but years ago boys began to live at home or at boarding-houses in preference to entering their masters' households, and this arrangement was desired no less by the masters than by their apprentices. The responsibility for their apprentices as social beings which masters thus early declined to assume, they have more recently begun to disclaim with regard to their industrial education. A boy is hired like a man to do some specific thing; he is paid less mainly on the ground that he is worth less, not that he receives his pay in instruction. He will be transferred from one class of work to another, if at all, only as the interest of his employer may render advisable, not as his own intellectual and manual development might require. This state of things has become so common that at the present day the circumstances are highly exceptional in which a boy has an opportunity to learn the whole of his trade under typical articles of indenture, if he desired. But he has little desire to do so; for we Americans change occupations so frequently and success is so often attained in a vocation that has been undertaken late in life, that comparatively few young men are found ready to contract away for a distant benefit, three or four years of the period of their greatest activity. Moreover, the opportunities which existing arrangements afford of half learning a trade as an apprentice in one establishment, and then entering another to practice it as a journeyman, are almost irresistible to the average youth, however much such a course may impair his value as a mechanic and restrict his ultimate wage-earning capacity. Some manufacturers have successfully united in an effort to check this evil.

Another circumstance that ought not to be overlooked in this connection is the fact that many of the establishments in which apprentices would be trained, are themselves so short lived that their usefulness as manual labor schools could not, under any circumstances, be very great. Even where the establishment continues, the work done in it may change with great rapidity; and, owing to the subdivision of labor already referred to, none of it may be of a character suitable for affording instruction in manual training.

Relying, then, on the experience and observation of my hearers to confirm the correctness of these general considerations, I shall assume that they agree with me in believing that apprenticeship, as at present existing in the United States, is incapable of supplying good workmen sufficient in number for our industrial needs.

2. I now proceed to inquire whether the system admits of such modifications or extensions as will fit it to fulfill the purpose for which it was originally designed.

The obstacles in the way of effecting such modifications in the system as would adapt it to our changed industrial condition seem to me insuperable. I am aware that a contrary opinion has been ably set forth by a recent English writer, Rev. Henry Solly, who is identified with industrial education in that country; and if employers were more inclined than they seem to be to take an enlightened view of their own interests, I readily concede that the greatest difficulty would be at once removed. But he was speaking of England more particularly, and without undertaking to express any opinion as to the practicability of the scheme suggested for that country, I think it might be easily shown to be incapable of general application in the United States. In doubting, as I do, whether the apprenticeship system of this country would prove capable of modification in the direction indicated, I would not be understood as affecting to deny that even legislation alone has been able to favorably modify that system in certain important respects, but these are not generally of an industrial nature. For instance, the laws which numerous States have passed to confer on the managers of reform schools the power to apprentice their wards have widely extended the beneficial influence of that class of schools, and made the date of many a wayward lad's commitment to a reform school the beginning of what has eventually proved to be a respectable and useful career. An examination of the legislation of all the States and Territories, which I have compiled with reference to publication by the Bureau of Education, and which, it is hoped, may soon be in the printers' hands, has led me to see various steps that the State governments have been able to take in the direction of enhancing the usefulness and importance of their legislation on this subject. But the field of beneficial legislation in any direction is at best a narrow one. That tendency of both youths and employers to frequent change in their vocation to which I have referred as constituting one of the chief causes of the decay of apprenticeship, would be quite unaffected by any legislation respecting it that could be devised. If Mr. Corliss (to take a striking example) followed several occupations during his youth and early manhood, and only after maturity entered a machine shop, there to invent the great improvement in steam engines with which his name is identified, you will find it hard to convince a bright and ambitious American boy (and most American boys feel ambitious and *know* that they are clever) that he must go through a long and tedious course of apprenticeship to enable him to successfully grapple with mechanical problems similar to those which others have so brilliantly solved without any such preparation. Nor can legislation or argument do anything to restrain that unexampled division of trades into various establishments and its minute subdivision in these that is a marked characteristic of our times. This circumstance alone would usually place it out of the power of an employer to provide his apprentice with a good technical

education as regards his own trade, however willing he might be. And unless employers generally should act alike in this respect, those who made such provision would do so at considerable pecuniary loss. It is gratifying, however, in this connection to note that here and there an establishment exceptionally well situated both for giving this instruction and availing itself of it after it is acquired, has formed an honorable exception.

In dismissing this portion of the inquiry I do not dwell on the circumstance that the change in apprenticeship under discussion would reverse the present positions of masters and apprentices as to compensation. Under existing circumstances a boy is usually paid something when he begins to work, getting more and more as he approaches his majority. But if a boy is to be really taught by his master, he must henceforth pay something for his instruction, as apprentices used to do, or at any rate work without pay; and his period of preparation would then be as long as that customary in what are still called the learned professions. That any considerable number of the fathers of the boys in that class from which most of our mechanics come would receive this innovation with favor is far from likely. And unless it should be generally adopted its effect would be slight.

I think, then, that on the whole, we may fairly conclude apprenticeship to be incapable of such modification as will adapt it to our needs.

3. Before expressing very briefly any opinion as to what may most advantageously replace our present system of apprenticeship, I think it would be well to classify the various attempts that have been made in other countries to provide a fitting substitute for it; but the limits of this paper forbid. It would not of course follow that any one or more of these attempts should be imitated in its minute details here. Our country is so large, the conditions of life in it are so different in different sections, and our industries are so varied, that there will be quite as much need of judicious discrimination in the application of a good system when finally devised as of the inventive originality which shall construct such a system out of the chaos in which the subject is at present involved. But a knowledge of what has been attempted elsewhere may save us from costly blunders and unnecessary delay; and I would call the attention of those who are seeking information of this kind in a convenient form to the recent valuable reports of the English Royal Commission to Inquire into Technical Instruction, where full and interesting details are given.

The French Government also has recently published a work on the condition of art industries and the workmen in them.* It consists of the testimony given before a commission appointed some years ago to investigate the subject, together with the conclusions of the commission. A very

* *Commission d'Enquête sur la Situation des Ouvriers et des Industries d'Art*, Paris, 1884.

liberal interpretation was given to the term art industries, and the work will be found of great value as embodying the opinions of the leaders of French industries, summoned as witnesses, on the present condition and desirable changes in their respective trades.

I have I trust a becoming sense of diffidence in venturing to submit to an educational association as numerous and distinguished as this, the untried views of one who has never enjoyed the advantage of participating in the practical work of the school-room. But from this circumstance I have the consolation of reflecting that the short-comings of this paper will be promptly detected and exposed. I proceed, therefore, without hesitation.

To ameliorate the present deplorable condition of industrial education among us, the first step I think should be to induce the educational authorities of every manufacturing city of any considerable size to afford its youth good scientific instruction in the evening. The instruction should be free, or very nearly so. Drawing should be the most prominent feature of the teaching, because its applications are so various; but, besides this, there should be given every youth growing up in a shop, or about to enter one, an opportunity to acquaint himself with the principles of science involved in his daily work. The form which the provision suggested might take would vary in different cases: in some it might be found sufficient to imitate the *Conservatoire National des Arts et Métiers* at Paris, and provide lectures only, to adults as well as boys; in others, the need would be felt of special schools adapted to specific trades, like the well-known industrial schools in Paris, or the very useful trade schools of Belgium and Germany; but as provision of the latter kind, while much more effective than the former, would be vastly greater in cost, it would not at first be generally adopted. At the same time the beneficial effects of sound instruction in elementary science and its commonest applications, through gratuitous evening lectures, would be very great, and would soon show themselves in the improved manufactures of the cities making such provision.

For instruction in the daytime, I think there should be found in every manufacturing city of consequence one or more manual labor schools, well equipped with laboratories and scientific apparatus, to be attended by a succession of four or five volunteer classes from the public schools during two or three hours each day. The teachers employed should be skilled mechanics, well grounded in the theory of their trades, able both to show a boy how a thing is best done and tell him why the way chosen is best. If it be objected that such teachers are hard to find, I reply that that is a difficulty which has to be encountered whenever any new subject is generally introduced, but one which time soon overcomes. Manufacturers interested in securing good mechanics for their own works would, it is

believed, if properly approached, show sufficient public spirit and appreciation of their own interest to offer the rooms and steam-power needed for this instruction. For the volunteer exercises of the manual labor school pupils should be allowed with the consent of their parents to omit some of the studies of the regular courses as now required; since it may be reasonably, nay, hygienically, doubted whether even the elements of one or more trades could be advantageously added to the already overcrowded course of study. Without undertaking to consider in a sentence as large a subject as the course of study in the public schools, it may be suggested that some modification of it would be found desirable in connection with the new departure recommended. What seems to the manufacturers and artisans of this country an undue preponderance of literary studies at the expense of more available knowledge and training should be corrected. While the active interest young boys manifest in what they can do with their hands is utilized in the manual labor school, there might be advantageously substituted for some of the time given to geography and grammar thorough instruction in the fundamental principles of science.

Among the subsidiary advantages likely to follow the general introduction into city schools of voluntary manual instruction, at least one seems to be deserving of mention. One of the most frequent charges brought against the common school systems of to-day is that they tend to unfit pupils for working with their hands. It may be doubted, in all candor, whether the notorious indisposition of the average young American to engage in any manual labor likely to soil hands or clothes is fairly attributable to any bias given him by public school exercises or public school influences—the causes of that indisposition are, in my opinion, to be sought in an entirely different direction. But it *is* true that a boy may pass very creditably through the entire school course in one of our manufacturing cities without having any natural aptitude that he may possess in the way of manual dexterity cultivated in the slightest degree during the ten or twelve years he has been attending school. The school system has not perverted his mind on the subject, but it has allowed his body to become atrophied. Introduce manual instruction, and the occasion for this reproach at once passes away. I may have before me those who believe it to be no part of public education to train the body as distinguished from the mind. If such be the case, I have only to say that that conception of education which embraces anything less than the complete development of both body and mind seems to me as inadequate as it is fast becoming obsolete.

The most serious objection, by all odds, to the introduction of manual training is that it would be too costly, and the rate of tuition at some of the private schools of this kind, irreproachable in other respects, does warrant a surmise that the advantages of the institution are intended to be

restricted to the sons of millionaires. But that these high charges are not really unavoidable clearly appears from the example of similar institutions in other countries: the Diderot school in Paris, first known as the *École du Boulevard de la Villette,* is maintained at an expense of less than $60 per capita, and the Havre apprenticeship school costs little more than half that sum.

It may be admitted that taxation in our large cities has already reached figures as high as the tax-payers will be willing to bear, and it is to be hoped that private enterprise and individual philanthropy, as I have already suggested, would do much to diminish the cost of the changes here recommended; but after all, manual labor schools have quite as good a right to existence as some other educational establishments in our chief cities the beneficial bearing of which on the industries of the community is by no means so obvious as their cost.

Moreover it may be confidently believed that opulent manufacturers will not allow communities to bear the whole burden; they will wish to connect their names honorably with the practical development of the sciences by means of which they have become enriched. If the need of these institutions could once be clearly demonstrated, the examples of princely generosity, which abound in the educational history of this country warrant the belief that the public spirit needed would be seasonably manifested.

In taking leave of the subject I desire to add that I do not think the adoption of any particular set of details essential to the successful carrying out of the innovation in urban school instruction I have ventured to recommend; but something must be done, and done quickly. If, as our past history and the character of the American mind warrant us in believing, the United States may confidently look forward to a glorious industrial future, we must prepare our youth to play their part well: *animis opibusque parati.*

# DEPARTMENT OF SCHOOL SUPERINTENDENCE.

WEDNESDAY AFTERNOON, *July* 15, 1885.

The Department of School Superintendence met in the Bethesda Parish House, at 3 P. M. The President, Hon. LeRoy D. Brown, of Ohio, occupied the Chair.

The Secretary being absent, Supt. J. W. Knott, of Tiffin, Ohio, was elected Secretary *pro tem.*

## *INAUGURAL ADDRESS OF THE PRESIDENT,*

LEROY D. BROWN, PH.D.

GENTLEMEN:—Allow me to thank you for the honor which you have conferred upon me. Permit me, also, to acknowledge my gratitude to all who, while I was confined to my room by severe illness last February, contributed in any way to the success of the great meeting of this department at New Orleans. Let us congratulate ourselves upon the completion of another year's work in our profession, and let us hope that this meeting will witness a renewal of our professional zeal.

Many of the truest educational reformers of America have been school superintendents. It is to school superintendents that the people look for the testing of educational theories and for the right application of educational principles in the public schools.

Without competent school supervision the best-planned system of public education is ineffective. It is a hopeful sign that there is a growing demand for school superintendents possessing the soundest character, the broadest scholarship and the best business qualifications.

As this nation is still in its youth, so the common schools are as yet but little advanced from their beginnings, and school supervision has entered only upon the threshold of its noble mission. Hundreds of new counties are yet to be erected. Thousands of new cities are yet to be called into existence. New States are to be admitted into the Union; and these will all require an addition to the number of school superintendents.

Moreover, the increasing demand for system and uniformity in school work, as well as the tremendous importance of education itself, makes it certain that the Bureau of Education at Washington is to grow into a department whose chief shall be a cabinet officer. May we be found worthy of the trusts committed to our care!

A careful survey of the field of education in the United States justifies the conclusion that there are wide and widening opportunities for men of executive ability to do good in the world, as well as to achieve honor for themselves, by adopting the profession of school superintendent. One of the legitimate objects of the Department of Superintendence is to foster a professional spirit among the members of this body. This Department, representing, as it does, the executive side of public-school work, and including the leading school superintendents of the country, is intrusted with the performance of highly important duties connected especially with the Department of Elementary Instruction. It is greatly to be regretted that the complex organization of the Association renders it extremely difficult for the executive committee to prepare a programme which would enable all of us to attend the meetings of the Department, the work of which lies near that of the school superintendent.

At Washington, next winter, there will be an important meeting of this Department. I take this opportunity to urge you to attend that meeting if it is possible for you to do so. The question of national aid for education, and other questions of great interest to the friends of the public schools, will be before you for consideration.

Without entering upon details, that would consume your time, allow me to present for your consideration the following recommendations:

1. That you at this meeting take some action looking toward the preparation of school statistics reliable and uniform in character.

2. That you take the steps which will enable the members of this Department hereafter to attend the meetings of the Department of Elementary Instruction.

At the present meeting there are four subjects to be presented for particular consideration. There are other subjects that you will desire to discuss. Let us hope that whatever comes before us here may be dealt with according to its merit in a business-like manner.

On motion of Dr. Hancock, of Ohio, a committee on nomination of officers was appointed, as follows:—

JNO. HANCOCK, of Ohio.
EDWARD SCHEIB, of Louisiana.
W. H. TIBBALS, of Michigan.

The second paper was on

## THE COUNTY SUPERINTENDENCY.

HON. JOHN W. HOLCOMBE, SUPERINTENDENT OF PUBLIC INSTRUCTION OF INDIANA.

MR. PRESIDENT:—I was appointed to present to this Department a paper on The County Superintendency, with the remark that several States which do not possess that institution feel deeply the need of something of the kind, and wish to learn how it works in a State in which it is highly developed. I am therefore required to speak much of my own State and how we do things there. So I wish to make my apology at the outset, and to declare here and now that, in illustrating this subject with facts and conditions with which I am most familiar, I do so with no desire to hold Indiana up as a model to her sisters, and I beg that she may not incur, through me, any of the odium of the model child of the family.

I shall of necessity claim by inference some excellence for our schools, our educational system, and perhaps some other of our institutions; but believe me, sir, this is done in all modesty,—though with considerable confidence, since I find among the members of this Association and generally among my acquaintance in the East and in the State of Ohio a readiness to believe that the wild Indian and the buffalo have retired from our borders, the vast marshes have been mostly converted into corn-land and meadow, the primeval forest opened to the light of day, even pallid Ague put under the ban, and the inhabitants, adapting themselves to their improved conditions, are possessed of intelligence and civility,—to realize, in fact, that, no longer, if she ever was, the State of "The Hoosier Schoolmaster," Indiana now has two millions of enlightened and humane people, dwelling in cities, towns and farm-houses, thick-set throughout a noble domain of field and forest and river, of hill and dale, unsurpassed in fertility, hardly equaled in variety of resources, with church spires seldom out of sight, and a school-house (not on every hill-top, for that would mean few), but to every three and a third square miles of territory, and a teacher to every fifty-four persons of school age,—so favorable a a soil, indeed, for the growth of common schools that a system of public education has there been elaborated worthy of the pride with which it is regarded at home and the attention it has attracted abroad.

The feature for consideration in this paper is but a part of the larger subject of school supervision. The need of supervision of some kind, to

insure the efficiency of public schools, long understood and urged by school men, is now generally conceded by the public; but by what authority or officials it may properly be exercised will depend upon the relation of the common schools, as an institution, to the other institutions of the social organism.

The pure democracy of the New England village community has been brought vividly to our minds of late by the elegant lectures of Mr. John Fiske. Each township's absolute independence of all others, and, in local affairs, of the State itself, resulting naturally from the conditions of the original settlement and the character and history of the settlers, affords as perfect an illustration of local self-government as has ever been seen. As such a community, in town meeting annually assembled, passed ordinances on all matters of common interest, and chose selectmen, a clerk, a treasurer, tax assessors, etc., to administer affairs during the year; so, when the establishment of common schools became a question, this town meeting, out of its original, ungranted, and undelegated power, decreed the necessary taxes and chose from its own members a school committee to manage and control the schools. Acting upon its own authority and employing its own resources, without aid or intervention from without, the township could claim the schools as entirely its own, nor would there be any ground upon which an external authority could obtain jurisdiction over them. And, as might have been expected, such jurisdiction has not, to this day, been obtained to a very great extent. But one New England State has a county school officer, and his functions seem to be limited to the examination of teachers; and while every one has a central authority of some kind—whether State Superintendent or Secretary of a State Board—and while his influence is undoubtedly very great, his actual power is not extensive. The school in New England is essentially a local institution.

In Indiana a somewhat different origin has given rise to a different theory of the common schools as an institution. For though feeble attempts at schools were made in the early days by many individual townships—as no community of English-speaking people would remain long in a new settlement without endeavoring to provide education for their children—yet our school system was only firmly established and wrought out with strength and efficiency in its various parts through the united efforts of the entire people. Some other Western States have developed their systems upon a similar plan, under the influence of similar conditions, while others have worked upon the purely local plan, in imitation of the Eastern States. The different degrees of efficiency observable among the school systems of these States is nearly in proportion to the degree in which their administrative machinery conveys to each and every locality the impetus of the whole. To mark broadly the distinction be-

tween New England and Indiana, it may be said that in the latter, the common schools are a State institution.

It is not necessary, for the sake of this view, to commit ourselves to the citizen-making theory so prevalent in these days, and which I think ought to be re-examined as often as opportunity offers. It is commonly held that the State undertakes the education of the people because intelligence is essential to good citizenship, and that State taxation and expenditure for education are justified by the necessity of securing intelligence among the people, so that they will in turn preserve and maintain the State—an argument which seems to me to involve an inversion of ideas, a principle that would prove as futile in action as the attempt of the boy to lift himself by his boot-straps, and withal a proposition at variance with the genius of our institutions. For what is the State? The French king, inheritor and perfecter of an autocratic despotism, said, "The State, that is I!" The Spartans conceived the State as the corporate unity, absorbing into itself all powers, all rights; before which the individual stood stripped of every essential attribute of personal liberty. The French king might have said consistently, "If I educate my people, it will be to the advantage of the State, that is to my advantage. I will educate them. May I not do that I will with mine own?" The Spartan Government in effect said this. It assumed control of every citizen in his childhood and relaxed not its hold till old age, training his heart in devotion to Sparta, his intellect in cunning for her service, his body in the hardships, discipline, and tactics of war for her aggrandizement and defense, regulating his domestic relations, practically destroying his private life—and all for the State, nothing for the man.

But with us, what is the State? Is it the governor—to-day one man, to-morrow another? Or is it the entire body of men who administer the public business—State, county, city, town, and township officers, including school trustees and superintendents? But perhaps it were safer not to attempt a precise definition of our notion of the State. It is at any rate very different from the Spartan's, still more different from the French king's. It is the *res publica*, the commonwealth, the interests that are public and common to all the people. What these interests are, after the few general classes always intrusted to the governing agency, may give rise to differences of opinion. Various Socialistic and Communistic theories are based upon the belief that the control of government should be extended over a greater or less number of interests beyond those usually committed to it. But, in this country at least, the maintenance of schools is undertaken by society in its corporate capacity either as the State, the town, or the district; the property of all contributes to the common education. In this we are Communists; but we are a practical people, and do not take fright at names. A Communistic practice that proves to be of

general advantage we fear not to adopt. But, if the distinction be appreciable, the people establish and support public schools not in their political capacity, but in their corporate social capacity.

The support of education at the public expense is justified on the grounds of utility, economy and the general good, without special reference to civic duties. From the general diffusion of knowledge results, of course, a higher citizenship, better government, a more perfect State; but to say that the State educates the people to make them good citizens is to substitute effect for cause.

May we not say instead: "The people, wishing to give their children and secure to the community the benefits of education, find that they can do this cheapest and best and with greatest advantage to society by means of free common schools?" Is not that the all-sufficient justification of the system, without elaborating strained theories as to the right and power of the sovereign State? The public education can be shown to benefit every citizen, whether tax-paying or non-tax-paying, and the former in a measure beyond the amount of his taxes however great. This may then be classed as a purely economic and social question.

But upon whatever theory each individual may reconcile himself to the system, the principle is accepted by the people of Indiana that the education of the children is a public interest to be maintained by the revenues of the entire State and to be managed and administered under State direction. The acceptance of this doctrine has been promoted by the gradual accumulation of a permanent fund, the property of the entire people, the proceeds of which are devoted by the Constitution itself to be "inviolably appropriated to the support of common schools, and to no other purpose whatever." The common interest in such a fund, now amounting to more than nine and a quarter millions of dollars, and the distribution of its proceeds equally to all the children throughout the State, naturally suggest that the State should direct the manner of expending such a revenue, or should to some extent control and supervise the schools. This view once accepted, it readily follows that when the revenue from the fund proves insufficient the State may increase it by a general tax. Such a tax has been levied, and the amount, increased from time to time, is now fixed at sixteen cents on the hundred dollars and fifty cents on each taxable poll. The interest on the permanent fund and the proceeds of this tax constitute the State's revenue for tuition, which is apportioned twice a year among all the school corporations, on the basis of the school population; and though every corporation is authorized to supplement the amount thus received, by a local levy within its own limits, yet the State's revenue is the main dependence of the schools, furnishing three-fourths of the amount of the teacher's wages. This revenue then may be regarded as the basis of the State's control of the schools, and the means of realizing

the injunction of the Constitution that the system be "general and uniform" and the schools "equally open to all." A general and uniform system implies an equalization of benefits as far as possible among all persons and all localities. The first step toward securing this was the attempt to establish a uniform standard for the qualifications of teachers. A law was passed prescribing the subjects in which all applicants for license to teach should be examined, and in each county a person was appointed whose duty it should be to conduct the examinations and to determine the standard of proficiency that should be required.

The function of this officer was limited to examining and licensing applicants for positions as teachers in the schools of the county. There his power ended. The applicant received his license, negotiated with the trustee for a position, obtained a school, and taught it for the term of his employment, as he was able or as he thought fit. No authoritative supervision followed him in his work except a possible visit from his trustee or director, who most probably had less appreciative of the requisites of a good school than the teacher himself. The administration agencies of the public school system were in most of the younger States for years limited to those I have incidentally mentioned. The order of their creation was probably this: 1st. Some kind of a local school authority, a school committee, a board of trustees or directors—in Indiana, a single trustee for each township, a school board of three members for each town and city; 2d. An examiner or board of examiners to determine the qualifications of teachers as to scholarship, these generally for counties, but sometimes for smaller divisions; 3d. A State official of more or less jurisdiction, generally aided by a State board. In some instances the chronological order of the 2d and 3d may have been reversed. What then could these agencies accomplish? The State Superintendent could supervise the management of the school fund, if there were any, could see that it was safely and profitably invested and the interest duly paid; he could apportion the revenues derived from the fund and from State school taxes among all the counties and all the townships, towns and cities, and could see that these moneys reached their destination; he could receive reports and compile statistics; he could by correspondence answer inquiries and decide controversies regarding school affairs; he could hear and determine appeals arising under the school law; he could travel over the State, lecturing, pleading, and exhorting among the people in behalf of education; but he could not reach any particular school or system of schools. As far as the condition of the schools themselves was concerned he could be but an influence, and an influence of the feeblest and remotest kind.

The county examiner could do something toward raising the qualifications of teachers as to scholarship, especially if the subjects of the examination were prescribed by law. But, as a mere examiner, this offi-

cial would inevitably be little more than a functionary, performing his duties in the most thoroughly perfunctory manner. He would usually be a rural professional man, accepting the office of examiner for the sake of the small addition its fees would make to his income as lawyer, doctor or preacher. His official work would receive little thought or interest, and his standard of attainments would be fixed by the half-forgotten erudition of a college course of thirty years before. But even if the work of the examiner were well and conscientiously done, so as to insure that every person admitted into the schools as a teacher should possess an adequate knowledge of the subjects to be taught and some degree of literary cultivation, yet but a part—and perhaps not the most important part—of his qualifications has been determined. Nothing is known of his aptitude for work in the school-room, his personal sympathy, his skill in managing children, his tact and fertility in resources, all the delicate qualities of mind and heart that go to make up professional skill. These can only be determined by close observation of the teacher at his work from day to day, and observation by a person competent to appreciate and estimate such qualities. But to this did neither the jurisdiction nor ability of the examiner extend.

Could not such supervision, expert professional supervision, be supplied by the local authorities? If so, it would be sufficient. If the school boards or trustees of the various school corporations were men of education themselves, and besides this were conversant with the educational science and art, their visitation of the schools and instructions and suggestions to the teachers would secure satisfactory school work. This would probably be accomplished without uniformity among corporations, since there would be no necessary co-operation among them; but uniformity, though in numberless ways highly convenient, is not essential, so long as each corporation secures good results in its own way. But it is evident without argument that school boards and trustees cannot themselves give such supervision, and, indeed, it is not expected of them. They are the representatives of the people, whether by election or appointment, for the business management of the schools, to control the property and money, furnish supplies, and employ and pay teachers. They are men occupied with their own affairs, and able to devote to the schools but a few hours each week.

The need of supervision was first felt in towns and cities, and was there supplied by placing a teacher of superior skill and experience in charge of all the departments of a large building, with a general direction over the work; and, as the advantages of thorough organization came to be better understood, a large city would employ a superintendent to plan and direct the work of all its schools. The improvement effected under this plan was so great that it was next applied, in part at least, to the

country schools. When fully applied, we shall see the schools of each township grouped and graded, as a single organism, under the supervision of a *township principal*, while all the townships and towns of a county will be co-ordinated under the direction of the county superintendent; but any city of sufficient size to employ a superintendent of its own will be co-ordinate in the general scheme with the county itself. I pointed out in some detail the benefits to be expected from the employment of township principals in a paper I had the honor to present before the Department of Superintendence at its Washington meeting, February, 1884. But the township principal is still in the future. The organization of country schools has not gone beyond the county superintendency. This office is an extension of that of county examiner. The inefficiency of the country schools of a generation ago, as compared with city schools, could not fail to impress the most casual observer. The need of something was seen, and supervision was tried. The examiner was changed into the superintendent, whose duty was not merely to examine and license teachers, but to follow them in their work, observe their success, aid and instruct them, hold county and township institutes, and, by untiring activity and visitation, labor to improve the teachers and the schools. How much such an official can do! But, to avoid the labor of stating an hypothesis, permit me to explain briefly what the county superintendency is and what it has accomplished in Indiana. In that State the general civil business and the educational affairs of each township are controlled and administered by a trustee elected by the people for a term of two years. The township trustees of each county appoint a county superintendent, who, besides being charged with the duties of examination and supervision, is a member and president of the county board of education, a body made up of the township trustees and the presidents of the school boards of the cities and towns, and clothed with the power of prescribing text-books and making general rules and regulations. The twelve years since the creation of these simple agencies have been the era of greatest improvement in the educational work of our State. Before that we had excellent schools in our cities, supervised by accomplished superintendents and taught by skillful teachers, conversant with the art and methods of instruction; but never till the county superintendency had we a means of conveying these things to the country schools. The country schools were, therefore,—but you know what they must have been, without order or system, and in the hands of untrained teachers. The county superintendents found a great work before them, and right manfully did they bend their energies to accomplish it. They strove to bring about uniformity—not for the sake of uniformity itself, in the sense of an iron inflexibility of mold, which every school must fit, but—by establishing a standard not lower than that of the best school in the

county, and drawing the others up to that standard, as a point of departure from which all should move forward together. The first step in this work was the improvement of the teachers, and the superintendents resolved to effect this, as far as possible, simultaneously and uniformly throughout the entire State. In one of their first conventions they called upon the State Board of Education to aid them by the preparation of questions for the monthly examinations. This work the Board undertook, and every month, from that day to this, printed lists of questions have been sent in sealed packets to the ninety-two counties of Indiana, to be presented to the applicants for the teacher's license. Thus a uniform standard of qualifications was established, low at first to meet the necessities of the times, but which has been raised from month to month and year to year, till now it may be considered reasonably high. The demand for better teachers, created by these measures, gave our noble State Normal School a steady and healthful growth, and called into existence a number of private normal schools, some of which have attained great success and astonishing magnitude, while at the same time in nearly every county, summer normal institutes, of six or eight weeks' duration, began to be held, either by the county superintendent or some other experienced teachers, and the county and township institutes prescribed by law enjoyed a great increase in attendance.

After laboring in this line for several years, the work of classifying or grading the country schools was taken up. The eight common-school branches prescribed by law were arranged in a carefully-drawn course of study, extending over eight years, and the children were classified in this course according to their advancement. Simple as this plan seems, it cannot be put into operation without much difficulty, and in the face often of opposition on the part of parents, pupils and teachers. Uniformity of text-books is a prerequisite. In the old-fashioned country school the pupils used whatever books they might happen to have, each reciting his lesson from his own book, each also studying the subjects he fancied, to the entire neglect of others. A pupil, therefore, might have finished the fifth reader and never have studied geography, or might be quite proficient in arithmetic without any knowledge of grammar. In this respect one may stand for all. It is evidently, therefore, a slow and difficult task to classify a school of such pupils under a course of study. But that work is well under way in Indiana; in many counties it is accomplished, so that the pupils are carried forward from their A B C's, step by step and year by year, till they have completed what we call our common-school course, and are ready for admittance into the high school of the nearest town. This I consider a great achievement of our county superintendents —the importance and difficulty of which will be appreciated best by those who are most familiar with country schools and who have seen the same work going on in several other States. With us they have gone so far as

to have prepared and adopted in their convention, a year ago, a uniform course of study for the common schools of the State.

But, sir, I might continue at great length recounting the achievements of the county superintendents of Indiana. I will briefly indicate the various fields of their activity by enumerating their most important functions. A county superintendent is, then:—

1. The examiner of the teachers.

2. The conductor of the county institutes and director of the township institutes.

3. The visitor and inspector of the schools.

4. A court of appeal in controversies arising among trustees, teachers and patrons.

5. The collector and compiler of educational statistics.

6. The medium of communication between the central authority and the schools and trustees, being required by law to carry out the directions of the State Board of Education and of the Superintendent of Public Instruction.

7. A trustee at large for the county, as member and president of the county board of education.

In this last capacity the superintendent can accomplish a vast deal for the improvement of the schools. On this point I said, in my previous paper, already referred to: "One great service of the county superintendency, where it exists in connection with a number of trustees small enough to be reached, has been its influence in educating the trustees up to an appreciation of good schools and a sense of their obligation to furnish them." This is eminently true. The trustees are, as I have described them above, average citizens, honest and well-meaning, but with no special knowledge of educational work, and often with little education themselves. They need guidance and counsel, and accept it readily from the county superintendent. To the superintendent's influence with the trustees is largely due the great improvement observable in the externals of our school work, the better text-books, better houses, desks, and apparatus; and to this influence we look for many steps further, the lengthening and equalizing of the school terms of the corporations, the perfecting of the relations between the district schools and high schools, better pay for the teachers, and the like.

My estimate of the county superintendency, you see, is high. I think I do not exaggerate. In regard to externals, if the county superintendents did not find the country school-houses brick and leave them marble, they found them frame and are rapidly transforming them into brick, well fenced, with neat yards planted with trees and shrubs; and for the schools themselves, it is not too much to say that the county superintendents have doubled the efficiency of the teachers and put a fair common school education within reach of every child in the State.

## DISCUSSION.

Superintendent Stone, of Massachusetts, spoke of his experience with county superintendency in Maine. He pointed out some of the difficulties which would likely attend its introduction into Massachusetts—size of some of the counties, difficulty of access to certain districts, etc.

W. F. Phelps, of Minnesota, spoke of the school exhibits. Both of the State fairs of the State have offered premiums for the best exhibits made by country, town, and city schools.

State Superintendent Holcombe explained that the term "graded school," as applied to country districts in Indiana, does not mean that the school has different rooms or departments under different teachers, as in town and city schools, but simply that there are different classes or grades, distinctly and sharply defined, in one room under the care of one teacher ; and that pupils, after beginning at the lowest class or grade, are regularly passed or promoted from grade to grade, as in city schools, and not required or allowed to go over the same ground repeatedly, as in most ungraded country schools.

On motion of D. D. Metcalf, of Oswego County, N. Y., the President appointed a committee of three to investigate the whole subject of "Grading Country Schools," and report to this department one year hence. The following committee was named ·

D. D. Metcalf, of Oswego Co., N. Y.
John W. Holcombe, of Indiana.
J. J. Burns, of Ohio.

Superintendent Aaron Gove, of Denver, Colorado, spoke on the subject of "The School Superintendent as a Business Man." He made the following pertinent points, all of which he illustrated and amplified.

*First.* A superintendent should be able properly to take abuse.

*Second.* He should so dress and demean himself as not to be pointed out [by appearance] as a member of a particular profession.

*Third.* He should always be on hand at the most trying and important times.

*Fourth.* He should be able to oversee and properly to treat mechanics and other laborers who are employed by the Board of Education to do work on and about the school premises.

*Fifth.* He should not presume to think that everybody except himself is entirely ignorant of what his duties are and how they ought to be performed.

*Sixth.* He should carefully attend to the preservation of the school property under his care.

*Seventh.* He should be intimately acquainted with the business matters and the the financial condition of the town or city in which he labors.

*Eighth.* He should be able in a proper and manly manner to ask for what he wants, and not depend upon a long list of printed testimonials as to his great abilities and "fitness for positions for which he is likely to apply."

*Ninth.* He should conduct his schools, as far as possible, in an impersonal manner. He should fully use the press to inform the public about his schools, but never about himself.

Superintendent B. A. Hinsdale, of Cleveland, Ohio, emphatically indorsed most of the points made by Mr. Gove, especially the second and fifth points.

The President then announced the following

COMMITTEE ON NECROLOGY.

W. F. Phelps, of Minnesota.
Joseph F. Lukens, of Ohio.
Ulric Bettison, of Louisiana.

Hon. John W. Holcombe then offered the following resolution, which was unanimously adopted.

*Resolved*, That a committee of five be appointed to consider the possibility of securing uniformity among the different States in the compilation and presentation of educational statistics, and that such committee be instructed to report at the February meeting of this Department.

The chairman of the Committee on Nomination of Officers made the following report :

For President, Warren Easton, of Louisiana.
" Vice-President, A. P. Stone, of Massachusetts.
" Secretary, C. C. Davidson, of Ohio."

The report was unanimously adopted.

Adjourned.

## SECOND SESSION.

FRIDAY AFTERNOON, *July* 17, 1885.

The Superintendent's Department met in Bethesda Parish House, and was called to order by the President, at 2.30 P.M.

The minutes of the previous meeting were read and approved.

The report of the Committee on Gradation of Country Schools was called for. The chairman of the Committee, D. D. Metcalf, of N. Y., submitted a partial report, and offered for adoption the following :

*Resolved*, That this department of the National Educational Association fully believes in the idea of, and necessity for the establishment of a course of study in, and a plan of gradation for, the rural schools of the whole country.

D. D. METCALF,
J. W. HOLCOMBE, } *Committee.*
J. J. BURNS,

On motion this resolution was unanimously adopted.

The President then called for the reading of the following paper :

# HIGH SCHOOLS AND THE STATE.

BY J. E. SEAMAN, A. M., NEW ORLEANS, LA.

We assume it to be the duty of the State to establish efficient public schools. We believe if illiteracy increases, and is permitted the elective franchise, it will seat corrupt men in the places of political power, unhinge society, lessen values, and morally bankrupt the community. Thus far we will suppose there is no dissenting voice. But unanimity of opinion does not exist as regards the duty of the State to provide for what is called the "secondary education." This feature of our public schools is peculiar to American civilization, and justified by the principle that the social and political equality of a republican people is in the direct ratio of their mental and moral education; and yet, strange to say, we find even intelligent men who advocate its elimination from our public school system. Every now and then, in certain localities, a distemper rages, which may be termed the "high school fever." The diagnosis of the disease finds the patient laboring under the delusion that he is unreasonably taxed to provide a luxury for the poor; that the cost of the high schools ought to be applied to the paving and cleansing of our streets. This fever is endemic in several States. Its subjects are generally those men whose ideas never penetrate beyond the scanty vale that encircles themselves and the hour, or who, at the best, are the fanatics of a mechanical civilization. For them history is dumb, and the present has no stirring significance. The world around them is fermenting with projects of beneficence; the chariot wheels of humane propagandism are hurried forward till they are heated with motion; schools of every grade and every model are established to meet the wants and exigencies of the day,—and yet these individuals do not feel summoned to take an active and beneficent part in the stirring moral movements of the age. Nothing can rouse them but the fact that inert matter can be used in a thousand ways for the profit of man. Even here they do not seem to know that the cultivated public mind will multiply and perfect the combinations and modifications of matter, as well as fertilize noble feelings and direct noble thoughts for the welfare of themselves and all humanity.

We Americans boast that we are a providential people, with a sublime mission. We are to lay broad and deep and durable the foundations of true republican liberty and an advanced civilization. Now, for this work, it is as plain as noon-day that the people must be educated. It

must, moreover, be an acceptable education, one that comes recommended by the love of humanity, by improved amplitude and purity of thought, and by fixed integrity of purpose. The question may be stated syllogistically thus :

In all organized governments the source of power must be educated.

The people are the source of power in a democratic or republican form of government.

Therefore, the people must be educated.

Now, the major premise is self-evident; the minor, undisputed; therefore the conclusion is inevitable. But here arises the question, What scope must the State, in her educational enactments, give to the term "education?" We contend that the circumscribed course of rudiments taught in the lower schools is not education. They are the tools only. The tools of the carpenter are not the constructed and furnished house. If the ultimate object of a public school education be to lift up man to the dignity of a reflecting, self-guiding, virtuous member of society, then the instruction, scrupulously limited to the three R's, is a lamentable failure. It makes a set of men who are simply big children that know their letters. A moment's reflection will satisfy us that the high schools in this age are as important as the primary schools a century ago. They are imperatively demanded by the progress of the sciences, arts and inventions, and their application to the commercial and domestic uses of life. In earlier times what was necessary for the few is now equally necessary for all. We are immeasurably ahead of our unsophisticated ancestors. Men are now older than their progenitors. Those were days of farthing candles; these, of electric lights. The time has gone by when arithmetic, in science, and reading the New Testament, in literature, constituted the Mount Parnassus, to which the lower classes may aspire, but higher than this it is forbidden to climb. On the other hand, we do not require the State to make our youth learned scientists. Our high schools are not professional schools, not imitations of colleges, and not at all, strictly speaking, the exponents of the "higher education." They are simply the departments in which the tools acquired in the lower schools are practically and skillfully used in building up a race of men qualified for the duties and privileges of self-government. It is not the people who rule. It is brains; and education makes brains.

Again, institutions supported by the State should be as nearly perfect as possible in their appointments. The duty of the State to establish primary schools implies the duty to furnish them with permanent and reliable teachers. For a supply of such teachers, we look, not to the primary schools and colleges, but to the high and normal schools. Now, if the State is willing to spend millions for the support of primary schools, it is certainly the part of wisdom and economy to spend a few thousand

to establish nurseries whence can be obtained at all times life-long teachers, familiar with the curriculum of the public school, its modes of instruction, and eager to adopt other and better modes as they are constantly revealed under the "new education."

A word as to the impending conflict between labor and capital, and the onward strides of socialism and communism. A mob spirit is abroad in the land. Perchance it is only a spark, but that spark, being essentially contagious and progressive, must be extinguished, or it will soon become a mighty conflagration. History repeats itself. "Forewarned, forearmed." It is madness to remain pillowed serenely amid surrounding pestiferous and poisonous influences. The accumulation of riches in this country, brought about by the rapidity of industrial and commercial movements, tends to devote the sweat and lives of the many to the profit of the few. If the elevation of the masses does not keep pace with this materialistic progress, misery and demoralization will increase in proportion to the augmentation of production. Communism and socialism will then claim to be heard. Where only individuals and classes are improved in wealth and knowledge, the gulf between them and the ignorant and hopeless is widened, and yawns with more forbidding horror. The masses are more liable to reckless prostitution and abasement by the unapproachable superiority of the few. Interrogate history, look through society, and you will invariably find that a mode of life purely material, and deprived of the stimulus of intellectual and moral principles, ends in plunging the soul into slavish stupidity, or brutal sensuality, and often into violent acts as insane as they are criminal. In view of this crisis it is the duty of the church and the State, each in its own sphere, to intervene. Both are intrusted with the weal of society, and both are raised to the dignity of power over the minds and hearts of men, and neither can shift the responsibility. It attaches with the constancy of eternal truth, and writes upon the public heart the evidences of uncompromising accountability. Nothing less than the State can check the prevalence of revolutionary ideas and the assailment of social and proprietary rights. She has the requisite means, vitality, unity and permanency. What means shall she employ? Shall she establish a network of police force? This is the weakest and most unworthy of all remedies. It is monstrous that public disorder should be visited by vindictive laws enacted by those far removed from temptation. The first steps of the State should be to get possession of the minds of men; get control of their ideas. The ideas which a man forms of his well-being and dignity determine his character for good or evil, and settle the degrees of his energy. The State should aim to make the principles of virtue and intelligence, presupposed in the very organization of our government, general among the people. This can be accomplished by a system of uniform, well-organized and liberally supported

public schools. The high schools, especially, should be objects of the first solicitude. They confront and abash the haughtiness and tyranny of insolent wealth. He must indeed be a vicious, ignorant and ill-bred man who is destitute of respect for the intelligence and worth of his humblest employee. The high school education detects and exposes the fallacies of socialism; the poor learn that they have an interest in respecting the property of the rich; and that their powers and their labor are also real property, which require to be respected in turn. It is necessary, in order either to destroy evil or to effect good, to adopt intellectual and moral means. This is the only preservative against social dissolution, as well as the only germ of invaluable improvements. The power of education, rightly conducted, is almost omnipotent. It will make useful and peaceable citizens out of ninety per cent. of the worst children who fall under its influence. The Spartans were a hardy, warlike people. The Spartan public schools made them such. They became all that the Spartan State desired, a nation of warriors and ferocious patriots.

Of all the objections to the high school, the most absurd, the most pitiable, is the plea that the higher education unfits for the position the poor are expected to occupy. How does this contemplated revival of Egyptian caste accord with the spirit that gave birth to our form of government? Such an opinion ought to feel rebuked and confounded in the presence of the long roll of humble names which are and have been equally the ornaments and blessings of American life and civilization. Again it is asserted that the higher education forms a distaste for all kinds of manual labor. It is ascertained from careful and persistent inquiry that the graduates of our high schools have been distinguished for their industry, mental or physical, as well as their intelligence. The youth who frequented the school of Zeno, when asked by his father what he had learned, replied: "I will show you that by my conduct." I can personally testify that the graduates of our New Orleans high schools are almost without an exception, "living epistles" of the efficacy and excellence of these institutions. Their education flashes from their eyes, drops from their tongues, glows in their countenances, and breathes in their actions. A high school man will, if necessary, plant a vegetable, or pick up stones, and do it all the better for his education, and consequently earn better wages. If the man is doomed perpetually to earn his living by the sweat of his brow, even then he is not without great consolation. His mind can retire within itself, and revel in the abundance of its resources, while the hand makes the shoe or turns the wheel, and thus there is no offense against his high destiny as a rational and immortal being. In a word, knowledge supplies motives to labor, and just in proportion to the increase of knowledge will ordinarily be the increase of labor.

A word further as regards the proposition that the elementary studies

are quite sufficient for the masses. If the rich have the power, have they also the right to rob the younger generations of those privileges to which they themselves owe their wealth? Is it not a manifest injustice to property-holders to shut out their children from the schools for which they are heavily taxed, and oblige them, in addition to this burden, to pay from fifteen to twenty dollars per month for the education of their sons and daughters in private schools? Is it no spirit of feudal intolerance that would condemn the child to ignorance and drudgery because he is poor? The mechanic and the plowman are discharging an important part in raising the structure and accumulating the comforts and refinements of life. It is in everybody's mouth that their intelligence and virtue constitute the underlying principle of our government. Have they not, therefore, just claims upon the State for the means of making themselves fully unfolded men? Is it right, is it in the interest of good State policy to leave them susceptible of being tricked into respect for politicians, demagogues, and other ministers of craft, most of whom are utterly unworthy of respect? Unknowing and unsuspecting, how can honest men presume to get on in a world of politicians, among whom all intrigues are beginning to assume gigantic forms, all corruptions, a veil, and all interests, an advocate? The multitude are told that they are very intelligent, very patriotic, very virtuous. They are flattered, and, therefore, satisfied, while those who beguile them retire to their haunts, to laugh at the dupes, and fatten on the spoils. With no knowledge of mind or matter, ignorant of history, ignorant of constitutional law, is a man fitted to put an intelligent vote in the ballot-box, or to sit in the juror's seat? Will our industries find in him an efficient supporter? the cause of liberty, a vigorous champion? good morals, a devoted friend, or vice, a determined foe? In this land of republican excellence there are no castes of descent. Let there be none in that which, next to virtue, confers the highest nobility. "Remember," said Bacon, "that the learning of the few is despotism—the learning of the many is liberty; and that intelligent and principled liberty is fame, wisdom, and power."

It is observed that the sons and daughters of our most wealthy citizens form a large portion of the patronage of our high schools. This fact, in its relation to society and social institutions generally, is by no means unworthy the consideration of the State. The association of the richer with the poorer children, especially in the higher grades of our schools, affords an opportunity for the development of those social habits which are mutually beneficial. On both sides sympathies are evoked which are, in the noblest sense, healthy and improving. In this way the social fabric may be reared on a firm foundation, and those barriers and distinctions broken down which oppose the most formidable obstacles to the growth and permanency of liberal views of society and free government.

One of the most prominent objections is the cost of the high schools. The ledger book of profit and loss, exhibited in those States in which high schools are munificently supported, shows conclusively that the expense, whatever it may be, even the expense of princely edifices, of ample libraries, of galleries of art, of instruction under the most distinguished professors, is the best investment of State capital that could possibly be made. Taxes paid for the support of high schools, if "bread cast upon the waters will return after *not* many days." The established law of compensation, though the re-payment may not be in kind, governs not only the productions of the earth, but also the economy of men and nations. The more thoroughly educated a man is the more instinct with virtue he becomes, the more aglow with the spirit of the age, and the higher his obligations to manly usefulness. Take my city, New Orleans. Our two high schools cost, say one twenty-fifth of the appropriation for the support of all the city schools. Does any one suppose that these two schools contribute less than one twenty-fifth of the work done, and of the successful results attained? Go into the association of their alumni, and contemplate the intellectual, moral, and social worth of the press, the council-chamber, the counting-room, the farm, and the workshop there represented, and ask yourself how many dollars the intelligence and virtues of these gentlemen are worth to the State? Does a father calculate in this way when preparing his sons for an honorable representation of himself and his family in the contests of life? Why, materially and intellectually, are the bleak skies and sterile earth of New England in advance of the most genial climate and the rich soils of the Southern States? Whence the success and enterprise of the giant young States of the West? It is not largely due to the princely State and municipal appropriations made, without protest, to secure the ends of a general and advanced education? In these States the avarice of dollars and cents has not superseded the care for the mental and moral growth of the young, and its corresponding magnanimity in action.

It is asserted that the studies of the high school are not practical, that is, I take it, not directly relative to the occupations and trades. We live in an age specially enlightened in the matter of dollars and cents. We are all looking after the philosopher's stone. As in the days of Horace, so it is now, *post nummos virtus*. The practical, whatever that may be, is daily worshiped. When it is narrowed to a bargain and sale strictness, it is a mean and dangerous principle. Who are the really practical men? Only those who are plowing earth and sea for no other purpose than to reap a harvest of wealth? Who are constantly asking themselves *cui bono?* Is it favorable to my business interests? If not, I'll none of it. So Falstaff: "What is honor? Can honor set a leg or an arm? No! then I'll none of it!" It is a sad mistake to suppose utility to be

confined to those pursuits that aim directly at the accumulation of riches, and the gratification of physical wants. Whatever, in any degree, unfolds and strengthens the mind and heart comes within the legitimate limits of utility, and claims the profound consideration of men and nations. Now, the high school aims to prepare men for usefulness in the State, and this is done by educating them, that is, drawing out the capacities with which they are endowed. It claims to be the developer of brain force. It educates men to be men, and women to be women, on the basis of a common humanity, and not on the basis of some trade or occupation. It works through general elementary principles, and these principles are, after all, the most practical of all things. They lie at the foundation of every trade or occupation, of commerce, government, and morality. For the want of these principles none suffer so much as the multitude. The man who understands the laws of vegetation is the better farmer. The engineer who does not understand the principles on which his engine operates is no better than the fireman. The uneducated artisan working by rules, not principles, can only repeat, not improve, what thousands have done before. It is one thing to receive by the pouring-in process a host of miscellaneous ideas, and quite another thing to be able to generalize those ideas. Generalization requires thinking, and thinking always leaves something to discover or to invent. This power is best acquired through the great body of natural principles which underlie the analysis and uses of language, the philosophy of history, the sciences of mathematics, of matter and of mind. Every boy thus taught, and with reference to the fact that he is to be an American citizen, and every girl, an American citizen's wife, is, in the highest sense, practically educated. One such man or woman is worth more to the State than the whole cost of the high school.

The abolition of the high schools would compel a higher department in each grammar school, or the removal of the children after having completed the few elementary studies of the lower schools. In the former case, we have the high school under a different name, we have a complication of work, and an increase rather than a reduction of expense.

In the other case, society and the State would be deprived of the services of thousands of our brightest and worthiest boys and girls; our schools would soon become charity establishments, directed by hedge schoolmasters, worse than no teachers, whose consciences do not forbid the employment of their miserable functions to cheapen and deceive. The high school is necessary in order to secure the best possible results in the lower schools. It undeniably lifts them up to a higher and better work. It determines their individual and relative merits; it provokes generous emulation; it stimulates effort to improve in knowledge in order to be advanced to the nobler walks of learning; it exerts a whole-

some influence in throwing together many advanced scholars, inspires them with self-respect, uplifts their aspirations, evokes self-reliance and executive power. In a word, the high school is the stimulus and the great reward of the grammar schools.

In conclusion, we contend there are too many hands, and too little brain power. We want more directive force, and therefore must educate more rather than less. The fearful accumulation of materials and forces now in our country is demanding the intensest mental and moral action of our thronging millions. Never since God rolled this world out from chaos were there such openings into the wealth of the universe; never a people of such wonderful sagacity, restlessness, indomitable will, and immeasurable hope. The American people, in their unbounded freedom of thought and action, require the strong grasp of moral and intellectual culture. Any willful neglect on the part of our legislators or other functionaries to provide for this culture is a crime upon society; and the rights of society, disturbed by such neglect, are vindicated by the natural and implied obligations of the State to establish its members in security and happiness.

DISCUSSION.

Supt. Gibson, of Ohio, said that the superintendents of the schools of the country were certainly unanimous in their support of the high schools. He said the high school is essentially an American institution—it is the people's school. Brains must rule, or ought to rule, in this country. The high school eminently fits boys and girls for the duties of future citizenship. He was sick of hearing that the high school educates boys and girls away from their spheres. The American boy's or girl's sphere is the highest known to man, and they cannot be too thoroughly educated for that sphere.

E. W. Bemus, of Minneapolis, said to defend the high school before the people it is only necessary to show its importance in educating teachers. He instanced Duluth, Minn., in which place all teachers have to be secured from other places at high salaries.

D. D. Metcalf, of N. Y., said the great danger to this country is to be found in the mass of uneducated people pouring into it from abroad. This danger must be met and overcome by educated minds furnished by the schools of this country. The high school should be fully sustained for this purpose, as well as to furnish teachers for the lower schools.

Supt. Holcombe said that a system of high schools such as we have in this country, whether defended on the police-force side or on the economic side, certainly can be sufficiently defended to secure its permanency. He spoke of the maximum and minimum limits of requirements for admission, both as to scholarship and age. Judging from these, it is evident that a sufficient number of pupils will always be found to fill the high schools.

The following committee on statistics was announced:

Jno. W. Holcombe, of Indiana.
E. A. Jones, of Ohio.
Chas. S. Young, of Nevada.
Chas. D. Hine, of Connecticut.
S. M. Finger, of North Carolina.

The next paper was on

# ENGLISH IN AMERICAN SCHOOLS.

BY SUPERINTENDENT E. S. COX, PORTSMOUTH, O.

"FROM a man without a philosophy no one will expect philosophical completeness." Those who have learned to appreciate the fine insight and luminous intelligence of Mr. Matthew Arnold will readily recognize a bit of mocking humor which is so characteristic of one of the best equipped of modern writers. What Mr. Arnold, however, in his fluid Greek way, employs as a bit of mockery, may be taken more soberly by one who intends to deal with his subject in much freer fashion than is consistent with philosophic completeness.

Perhaps the one thing that most truly marks all the higher intellects of modern times is a love of reality. Whether they solve their problems or not, they are at least nobly free from all stock philosophies and pedantries, and have the invaluable habit of looking at things as they really and truly are. It is this high aim, for instance, and not his remarkable eloquence, that makes the pages of Mr. Carlyle one of the resources of the best heads and hearts in all English-speaking lands.

Is it not possible also to look at educational problems straight? Must the American teacher constantly prove his lack of cultivation by cleaving to stock notions and failing to profit by the attitude of the best intellects of his time? Let us cease to be mere school-masters that we may become, in a more adequate sense, promoters of intelligence.

In the very highest instruction there are always two elements, exactness and freedom. Exactness our best craftsmen have in some measure attained, but the element of freedom or liberality, has not as yet received its due recognition. This paper, therefore, is intended to be primarily a plea for power and breadth and cultivation in all instruction, from the lowest to the highest.

There are many things needed for the fitting and equipping of a fine intelligence for its work in the world. Among these things, perhaps nothing is more important than the acquiring of a fine and forcible use of one's mother-tongue, and the opening up to one's self the greater resources of one's own literature. In the very beginning, however, it is best to avoid any tendency to over-statement. Every path to the higher springs of power is a good path to travel.

In our discussion to-day one noble and incomparable standard must constantly be kept in mind, namely, the development and training of

power. A recognition of this high office of education will lead us straight to our mark, and render many explanations superfluous.

Perhaps the first thing that impresses one who aims to look at our instruction in English with clear eyes is that the American school-master is too much wedded to machinery. There is better thought in the air, doubtless, and a fresher impulse does now and then make itself felt, but, for the most part, we cleave to formal correctness, and forget the more effective elements of natural and beautiful speaking and writing.

The best thing that even a friendly inspection of our so-called language lessons yields is that one finds in these lessons a machinery which is tolerably well adapted to a rather crude state of things. It cannot be doubted that much of this machinery will fall away, as other mere machinery is destined to fall away, before the superior cultivation of the American teacher.

In primary instruction, the power of putting good and fresh thinking and observation into good and true words is the first thing to be gained, and to *that* all formal talk about quality words and action words and statements and inquiries should be kept strictly subordinate. As a result of our present style of instruction one often hears in the school-room sentences which are, in a sense, faultless, but when a pupil strings these technically faultless sentences together, what a poor idea they give one of the vigor and variety and copious power of the English tongue. Variety and copiousness may probably not rightly be demanded of children. It is not unreasonable to expect, however, that well-nurtured boys and girls should speak and write with directness and vigor, and these admirable qualities are precisely the qualities which our school-English commonly lacks.

Every practiced inspector of schools knows what dreary reading the average school essay is. Some accomplished men of letters have recently given us the benefit of their half-humorous but still valuable and forcible criticism on this subject. Now one who looks into the matter closely will find two reasons for the unreadableness of that remarkable production, the school composition :

1. The pupil has no first-hand knowledge of things, and hence puts no real freshness, or thought, or observation into his sentences.

2. His formal instruction has given him no adequate command of his implements, and he, therefore, lacks that ready and forcible use of English words and idioms which is so essential to all strong and valuable composition.

Nowhere, perhaps, do the schools so signally fail as in giving their pupils an accurate sense of the meaning and value and beauty of words. Perhaps fifty persons may be found who can construe a difficult sentence, at least according to the grammars, for one who knows a noble and sufficient piece of English writing when he sees it.

As before remarked, the art of putting a good thought in good words is the thing which should chiefly occupy an instructor in English, but this is commonly esteemed of quite secondary importance, the formalities of education occupying the first place. The result is commonplace, formality, extravagance, anything, in fact, but the capacity of uttering a readable and manly English sentence. This whole matter needs to be changed, and it can only be changed by the example and instruction of wise teachers who have learned from the right sources what really constitutes true and adequate speech. The fault is not that children are not made acquainted, in some formal fashion, with enough words; the fault is rather that their words do not represent that *knowledge* which can alone give them any value or potency. Too many American children are in a fair way to possess the doubtful accomplishment so much desired for poor Tom Tulliver. "I want Tom," says Mr. Tulliver, "I want Tom such a sort of man as Riley, you know, as can talk pretty nigh as well as if it was all wrote out for him, and knows a good lot o' words as don't mean much."

Mr. Whipple, our clear-sighted and vigorous American essayist, says admirably that a boy should not be permitted to use a word until he has earned the right to use it by some new ascension in his thinking or experience. If this incomparable rule were well followed in the schools, they would furnish us a somewhat different and more noble product.

As regards the subject matter of compositions, it may be remarked briefly, that natural history and sane and well-told stories are the proper nourishment of all those young minds which are best worth the lifting and saving. Besides their direct value in training to clearness and brightness of thought and speech, they can be made the basis of an untold number of school exercises which every teacher, with a properly devoloped inventive faculty, will know how to adapt for himself.

Something may doubtless be replied to the above protest against the mechanical method of teaching English. A somewhat distinguished Harvard professor, for instance, has recently said that, "Children should be obliged to master every point that comes under the head of correctness."

Exactness is an element of all first-rate workmanship, and this paper is assuredly not intended to be a plea for slovenly writing or slovenly teaching. Correctness, however, while a valuable element of speech, is by no means the most valuable. The mere avoidance of errors is no compensation for failing to say the thing you wish to say with brightness and force. To teach correctness in the dreary and uninteresting fashion that the schools sometimes teach it is to miss the real matter, and to make the old mistake of substituting the mechanical for the vital. Make your pupils observers, and let them hear good English and read good

English, and their exercises, though in some respects incorrect, will seldom lack freshness and simplicity and vigor. At all fit times, of course, teach the lesson of exactness and good workmanship, but do not commit the mistake of supposing that a knowledge of the formalities of speech will work some wondrous sea-change, and straightway put meaning and beauty where beauty and meaning were not.

Punctuation, capitalizing, and our few English inflections should be learned definitely and exactly; but this kind of work should be supplemented by that higher work which cannot be put into books, and which always awaits the cultivated teacher. For real mastery of the mother-tongue, the unconscious tuition of a fine example is, perhaps, worth all the text-books in the world.

The place of formal grammar in education has been discussed to weariness, and a nimble writer would, perhaps, seek to avoid it altogether.

Many so-called grammars are awkwardly written, and do not represent any adequate breadth of reading or knowledge of English usage. From such books the pupil learns little that is very valuable, and learns much amiss. What is really important in the grammar of *modern* English may be put into very small compass, and mastered in a year or so by those who have already attained a reasonably correct and forcible habit of speech.

If a higher and more accurate knowledge of English be desired, a year may very profitably be given in the high school to the study of the earlier forms of the language. In this way, as the scholarly Mr. Skeat somewhere observes, a truer knowledge of the structure of the language may be gained than by the perusal of any number of modern grammars prepared by men who know nothing of the real history of the tongue whose laws they profess to give.

As one way of liberalizing our instruction in English, we should have a better and more effective examination of teachers. This examination should include:

1. A test in grammar, including the mechanical conditions of speech.

2. A test in composition, that is in the ability to use accurate and vigorous English.

3. A test in the recognition and understanding of good and masterly English prose.

To the above may possibly be added for the higher grade of life-certificates, a test in Anglo-Saxon and early English.

A philosophic American educator is quoted in the newspapers as saying that the best teachers pass the best examination in grammar. If by this he meant merely formal grammar, I have not found the statement to be true, but, I think, the best teachers commonly do pass the best examination in English, using the term in the widest and most important sense.

When one turns to the more purely literary side of our elementary work, one finds as yet, even in the best schools, only

"The fair beginning of a time."

In some cities, whose schools are justly of great repute, this work seems chiefly to consist in the memorizing of certain delightful little poems which are supposed to be especially impressive to our quick-minded and imaginative young folk. These poems, I believe, are often dissected and discussed, in order that they may be the more fully understood. It is doubtless a praiseworthy thing to lodge a fine expression, or a beautiful piece of imagination, or a noble thought in the mind of a child. De Quincey's philosophy was right. These things do abide, and, whether at first understood or not, do, in the end, fortify the intelligence and character.

Only once more let us look at things straight, and beware of overestimating even true and valuable work. The memorizing of a little poem or two a week, however precious a thing it may be, will scarcely save a good intellect, or keep it on the road to the upper and healthier regions of thought. My inspection of schools does not convince me that vigorous-minded boys and girls are thus kept from the scandalous story-papers or the ill-written, but exciting, novel of the shops and the circulating library. Nor does the dissecting of these poems, to my thinking, greatly add to the value of the work. Many a graceful little poem is thus, I fear, hopelessly vulgarized and spoiled. It were better, perhaps, to let beautiful writing do its own work assisted, now and then, by simply a word or so of apt and admirable illustration or explanation. Such explanation or illustration the true guide will always know how to give, and no other need attempt the task.

But whatever value attach to short and memorable pieces of prose and verse and however finely and fitly they may be handled, they will not so catch and lift the intelligence of a young person as beautiful and impressive productions of considerable length. There is some virtue, doubtless, in every true piece of writing, however short, but it is not so interesting as longer works, and does not so surely lead to the fresher and higher fields of literature. I would advise for use in our elementary schools a few well-written and rightly-interesting modern books, prose stories probably taking the first rank. This advice, I know, is contrary to the opinion of some excellent thinkers and writers. An able and accomplished American critic, Mr. Hudson, would invite our young people at once into the rich and fragrant pasturage of the old masters of English eloquence and wisdom. The invitation is a high one, and the pathway to so rich a country may possibly win some young travelers. Is not Mr. Hudson, however, looking at things as they lie in his own imagination instead of

at things as they really and truly are? Does not the workmanship of Scott and Kingsley and Hawthorne commend itself to young eyes more surely than the workmanship of the elder and perhaps greater masters? To remarks of this kind an exception should possibly be made in favor of certain old books of universal fame, whose supreme genius makes them always modern. Notwithstanding this, for giving young people what an admirable writer has called the first gleam, one may still trust bravely to the best modern books, and perhaps even to the best American books.

Whatever books be chosen, they will need a free and right handling, a handling which is in the spirit of literature and not in the spirit of pedantry. If intended for actual use in the school room, they will need perhaps, first of all, a little judicious editing by a person of high and delicate literary sense, who knows just what to say and what to leave unsaid. This editing, of course, had far better be omitted than trusted to the clumsy and 'prentice hands whose chief vocation in life seems to be to mar other people's workmanship.

Fortunately well-edited and tasteful and seemly editions of some of the world's choicest classics for children are now before the American public. There are several ways of using these books in our elementary schools :

1. They may be employed at the right time to supplement the ordinary school readers.

2. They may be read aloud by the teacher with a few words of clear and bright illustration and explanation.

3. The teacher may simply act as a guide to the library, and by a study of pupils' tastes and aptitudes lead them to such noble and beautiful productions as they may relish.

As regards the first plan, the question at once occurs whether our best English stories and poems and biographies can be used as school readers without vulgarizing them, and thus retarding instead of advancing a taste for good and valuable thinking and writing? There are some things too free and high for the touch of the pedant, and a well-written book is one of them. Rather than spoil the best productions in the English language by stupid task-work, it were better for our fine-witted young people to still read at odd hours and find their own way to the intellectual promised land. It is something, however, to place before all young minds *entire* productions of the right virtue and beauty and interest, and the experiment of using these productions as school readers is no doubt worth the trying. With precisely the right person at the teacher's desk, it may be possible for the fairest and most fruitful books to be thus used without spoiling them.

The second plan proposed above affords one of the freest and brightest of school employments, and is, in very small measure, subject to that vulgarizing process which every quick-minded instructor so much dreads.

It is certainly a better way of learning to relish literature than the rather serious and dreary lessons that are now become so common in our high schools.

It is perhaps, however, as a guide to the library that the teacher who really knows books can be of the highest service. It is good to keep *one* place open for the free development of children's aptitudes. "Keep a boy's nature," says Emerson, "and arm it in the direction in which it points." In no way can this be better done than by assisting the intellectual leaders to a right choice of books, and thus starting them without delay or hindrance on their own proper and delightful pathway to knowledge.

There should be some way found in our routine education for the nurture of our most valuable intellects. Notwithstanding all that has been said by school-masters from Roger Ascham to the present, it is the good heads and not the poor ones that require the highest skill in the guidance. If the teacher have the art to lead these to a few of the greater sources of knowledge outside his routine work, where they can have an opportunity for the free and energetic and noble play of their faculties, they will be comparatively safe. Now one of these sources of knowledge is certainly to be found in strong and inspiring books, and it is by being led to these that our most precious minds will have an opportunity once for all of getting above the intellectual mediocrity that surrounds them. The boy who has felt the health and radiance of *one* good book in his brain, has on him the mark of his future superiority.

To real teachers, one feels like saying, be workmanlike and exact where exactness and workmanlike qualities are demanded, but don't be afraid of stepping outside your routine instruction to point out to a spirited boy or girl some new pathway to the breezy uplands of thought. It is a service like this to superior minds that lifts us above the commonplaces of a mechanical and inert educational Philistinism.

In one of the above ways it should not be difficult to lead young people, at least of a happy nurture, to those clear masters who are the only true friends of the intellect, and the only true law-makers of English speech.

Is a somewhat higher and more exact study of literature than that already indicated possible or advisable in our public high schools? Such study has for some years been attempted with a success, varying, I suppose, according to the plans and gifts and knowledge of the instructor.

First, there is the old plan of reading about books instead of reading the books themselves, a plan by which the heads of pupils were furnished, without much trouble, with a considerable amount of conceit and cheap knowledge. This plan, I suppose, it is not necessary to discuss before an audience of widely-read and instructed American Superintendents. Even

your Dry-as-dusts are being forced, at last, to conclude that reading books of travel is not a quite satisfactory compensation to one's lungs for failing to breathe the air of a benign climate. If the higher impulse in education has done nothing else, let us hope that it has driven the knowledge of conceit from the field and substituted for it the knowledge of power. One is only excusable for taking any cheap road to knowledge who is in extreme haste to reach his journey's end, and such intellectual journeys are commonly not worth the taking.

We have next to consider a very different method of studying literature, a method now in use in the best schools, and sanctioned by eminent and accomplished scholars. This method I may designate briefly, and for the lack of a stronger and fitter term, the dissecting method. We now not only read our noblest English classics in school, but we take them to pieces and examine minutely their thought and style and general workmanship. This method was probably borrowed from a certain way of studying the older classics which regarded them not so much as majestic pieces of literature as exercises for the grammarian.

The question for the temperate and clear-sighted educator to decide now is, whether this is the best way of getting a young person to recognize and enjoy and understand a solid and masterly piece of English writing. It has the sanction, as I have said, of eminent scholars, while men of letters, with as keen eyes and sharper pens, have protested against it. One of the brightest-minded of American authors, but the other day, asserted that since Shakespeare has become a sort of school-task book, thoughtful boys and girls no longer read him, as they used to read him, for the simple delight they take in his great and imaginative pages.

It is possible that some distinguished writers venture dangerously near Mr. Emerson's "Superlative" in their criticisms of public schools. It is so much easier, and, on the whole, so much more literary and effective to condemn things heartily than to draw with firm and exact hand the precise line of truth, nevertheless it is the mark of an open intelligence to profit by every piece of fresh and high criticism, and sober thinkers will probably agree with men of letters that our present textual and critical method of studying a great book is an extreme method.

It happened recently to be my duty to inspect a class of young ladies who were engaged in the study of Mr. Rolfe's excellent little edition of Tennyson's *Princess*. I found that they had given to the first part of this delightful poem nearly as many weeks as there were pages. It was easy to discover further that they had simply been engaged in word-catching, and that the valuable thinking and affluent fancy which Mr. Tennyson always puts into his best work had quite escaped them. Pretty nearly the same experience might be recorded in regard to the study of Shakespeare, and whether or not Mr. Rolfe's, in many respects, admirable and

scholarly editing, is in any measure responsible for this state of things, I shall not attempt, at present, to determine.

Must one, then, adopt the freer views of another Shakespeare editor, and conclude that time given to exact verbal work is, for the most part, time misspent? The precise truth seems to be well stated by the firm and accurate hand of Landor. In one of the "Imaginary Conversations," the poet Southey is made to remark: "We must not rest too often, too long, or too pressingly, on verbal criticism."

To this the scholarly Porson has an apt and vigorous rejoinder: "Unless we, who sit perched and watchful on a higher branch than the word-catchers, and who live on somewhat more substantial than syllables, *do* catch the word, that which is dependent on the word must escape us also."

The thinkers whom I address to-day will have little difficulty in reconciling the fine sentences of poet and scholar, and in seeing where, in good heads, exactness and freedom meet.

In schools the main matter is assuredly to get young people to read and enjoy a noble author. Now, knowing the words and idioms of Elizabethan English, for instance, is undoubtedly necessary to knowing Shakespeare, but one must not come to think that grammar or philology, or any manner of word-catching, is the main matter, and the reading and relishing of Shakespeare a subordinate matter. When one does this, one becomes a pedant and not a teacher of literature. It is right to deal with words, and to do severe and accurate work with them, but the instructor must be sure that he sits with Porson on a limb above the word-catcher, and is ready to accept every invitation from his author to the upper air of great and sane thinking and writing. He who is able to do this—who is incapable of slipshod and inaccurate work on the one hand, and never ceases to breath the atmosphere of great thoughts on the other—is the *master* for whom the schools wait.

My thoughts, you will observe, all tend to one point, namely, the insight and breadth and cultivation of the teacher.

Mr. Lowell has somewhere said that we are the most public-schooled and least cultivated people in the world. The modern school-master with a taste for polemics and Philistinism has, of course, a reply to words like these, but as Mr. Lowell happens very fitly to represent the highest level of American thought and character, his words may possibly be better worth the heeding than the rejoinder.

What we need is not simply more cultivated teachers, but a supervision of greater breadth and power. We cannot expect liberal and right instruction while a person occupies the superintendent's office whose chief ability is an ability to manage ward politics and secure his own re-election. Place-keeping is, doubtless, very important, but it is not so

important as the doing of broad and valuable work, and the rendering of one's self worthy of one's place. About the only educational grace is mastery, and this, in the end, will prove quite as victorious a thing as shrewdness and scheming and the arts of the politician generally. It is good to be practical, but, after all, he is the most practical who catches the best thought of his time, and makes the best use of it. This is said without undervaluing the business side of our vocation, and with, I trust, a proper amount of

"The fellow-craftsman's sympathy."

And now, in closing, let me say that I plead for literature itself on account of its superior breadth and nobleness. Its high value in lifting and liberalizing the intelligence, I believe is appreciated by all thoughtful men. Mr. Arnold and Mr. Huxley may have their little debate, but Mr. Huxley's own masterly style bewrays him, and shows well enough where he has been. To the teacher, a wide study of literature is to be recommended if only that it may lift him from his stock notions and his love of machinery into an atmosphere of real intellectual freedom.

The modern spirit, indeed, demands reality, as our men of science tell us, but a great book is one of the most real products of the world, and the future will find, as the past has found, that no benefit is more positive than the benefit of wide and beneficent intellects.

We cannot spare our shining intelligences, the sovereign influence of the best heads of the world. Like Emerson's Astrea, they are

"There for benefit,
There for purifying storms."

I have advocated liberality, but he can never be illiberal who frequents *that* company, and walks where the masters of all thought have walked.

## DISCUSSION.

In the discussion of this paper, E. O. Vaile, of Chicago, being called by the Chair to lead in the discussion, said that just at present he is a little skeptical as to the benefits to be derived from the mechanical way of teaching pupils to read pursued in many schools. He believed it led to a mechanical method of composition at a later period of school life.

Miss Sutherland, of Mansfield, Ohio, said she had never heard a paper which so thoroughly and masterfully expressed her own ideas as did the one under discussion.

Dr. S. F. Scovel, President of the University of Wooster, Ohio, said he believed there ought not to be less, but rather more, machinery. It takes forty years without the machinery to accomplish what should be accomplished in four years with it. He instanced the effects of machine training as seen in Germany since 1819, and also referred to its effects as seen in the more recent history of Alsace-Lorraine.

Mrs. Heath, of Boston, said if one should read the article in *Harpers' Magazine*, by Dr. Hill, of Harvard, it would greatly benefit him. She plead for a very thorough drill in the mechanics of reading, composition, etc., at a time when the child is too young to understand the beauties of the higher phases of composition and literature. Afterwards he will get invention, imagination, breadth of thought, and the like.

Supt. Jno. B. Peaslee, of Cincinnati, emphasized what had been said by Mr. Vaile. Too much time is given to *imitative reading*, too little to getting thought. He spoke of his position on "Memory Gems." They are not made as a substitute for extended study of literature, but rather to lead up to and induce a thorough, extended and appreciative study. Apart from the elements of an education, what a child *reads* is far more important than what studies he pursues in school. He believed the proper way to study literature is to begin with writers of the present day and read back to Chaucer, rather than begin with Chaucer and read down to the present. He said he was glad of the work the great publishing houses are doing in publishing edited editions of the masterpieces in English literature.

Supt. Ulric Bettison, of New Orleans, La., said he found his pupils had to be limited in time when he would have them write well. Let the pupil give his thoughts first, then in a second or third attempt attention may be given to style, etc.

Prof. Beach, of Madison, Wis., said: "Get our pupils to think first; afterwards give attention to the methods and processes of reasoning."

Prof. Cox closed the discussion. He said no one valued exactness more highly than he, but he did *not* value the exactness which comes from too much machinery.

The President then, by a few remarks, closed the work of this Department for this year. He thanked those whose names appear on the programme for the promptness with which they had responded, those who had taken part in the discussions which had made the session one of so much interest and profit.

Supt. D. D. Metcalf, of New York, moved a vote of thanks to the Chairman for the able and impartial manner in which he had presided at the meetings of the Department, which was unanimously adopted.

Thereupon the Chair declared the sessions of the Department adjourned *sine die*.

J. W. KNOTT,
*Secretary pro tem.*

# DEPARTMENT OF HIGHER INSTRUCTION.

WEDNESDAY AFTERNOON, *July* 15, 1885.

## PROCEEDINGS.

THE Department of Higher Instruction of the National Education Association met at 3 o'clock P.M., in the Hall of the Saratoga Post of the Grand Army of the Republic.

The President of the Department being absent, Dr. Eli T. Tappan of Kenyon College, Ohio, was called to preside. Prof. W. G. Williams of the Ohio Wesleyan University acted as Secretary.

On the motion of Professor Smith of Indiana, a committee of three was appointed on the nominations of officers for next year. The committee consisted of Dr. Mowry, of Massachusetts, Professor Smith of Indiana, and Professor Canfield of Kansas.

On the motion of Professor S. N. Fellows of Iowa State University, the following resolution was adopted ; namely :

*Resolved*, That the name of this Department, viz.: "The Department of Higher Instruction," shall be interpreted to include the University, the College, the Academy, and the High School ; and all workers in such institutions, who are also members of the General Association, are invited to enroll themselves in this Department.

The following Roll of persons in attendance was then made out ; to wit :

Eli T. Tappan, Professor of Political Science, Kenyon College, Ohio.
Charles A. Blanchard, President of Wheaton College, Illinois.
James H. Canfield, Professor of Historical and Political Science, Kansas University.
William A. Mowry, Managing Editor of Journal of Education, Boston.
O. F. Lumry, Professor of Ancient Languages, Wheaton College, Illinois.
Albert H. Tuttle, Professor of Zoölogy, Ohio State University.
William G. Williams, Professor of Greek, Ohio Wesleyan University.
E. O. Hovey, Principal of High School, Newark, N. J.
A. L. Goodrich, Master of High School, Salem Mass.
Merrick Lyon, Providence, R. I.
J. A. Lippincott, Chancellor, University of Kansas.
C. W. Sheldon, Professor of Latin, Susquehanna College Institute, Towanda, Pa.
E. J. James, Professor of Political Science, University of Pennsylvania.
Frank S. Capron, Professor of Physics and Astronomy, Colby University, Maine.
G. H. Laughlin, President of Hiram College, Ohio.
Rev. S. N. Fellows, D. D., University of Iowa.
Rev. A. J. Eaton, Principal of High School, Plymouth, Mass.
N. T. Clarke, ex-Principal of Canandaigua Academy.
Jerome Allen, Editor of School Journal, New York City.
Andrew F. West, Professor of Latin, Princeton College, New Jersey.
A. Gaylord Slocum, Principal of Free Academy, Corning, N. Y., and Superintendent of Schools.

J. D. Burries, Professor of Mathematics, Alcoria Agricultural and Mechanical College, Rodney, Miss.

Miss Lizzie L. Harvey, Principal of High School, Attica, Ind.

D. A. Long, President of Antioch College, Yellow Springs, O.

Edward W. Bemis, Springfield, Mass.

J. Stanley Hall, Professor of Pedagogy, Johns Hopkins University.

Herbert Miller, M.A., Instructor in Latin, *Lauveur* School of Languages, Philadelphia.

Chas. W. Super, President of Ohio University, Athens.

E. R. Payson, Principal of High School, Binghamton, N. Y.

T. K. Wright, Munro College, Ellridge, N. Y.

Henry R. Waite, President of American Institute of Civics.

H. W. Cowles, President of Female College, Elmira, N. Y.

G. Edwin McLean, Professor of English Language and Literature, University of Minneapolis, Minn.

Harry Pratt Judson, Professor of History, University of Minn., Minneapolis Minn.

Asa Boothby, Principal of High School, Fulton, N. Y.

Julius D. Dreher, President of Roanoke College, Va.

James P. Slade, President of Almira College, Greensville, Ill.

Sylvester F. Scoville, University of Wooster, Wooster, O.

Francis M. Burdick, Professor of Law, Hamilton College, Clinton, N. Y.

D. R. Martin, Superintendent of Schools, Pullman, Ill.

Mrs. Delia L. Williams, Ohio Wesleyan University, Delaware, O.

Lucia Stickney, Hughes High School, Cincinnati, O.

The gentlemen appointed to present reports this afternoon were not present at the session of the Association, though they furnished copies of their papers ; but the general rule of the Association forbids the reading of their papers in the absence of the writers.

On motion of Doctor Waite, the Department took up the subject of the difference between the University and the College, and spent an hour and a half in an interesting and profitable discussion of this theme. A large number of members participated in the debate.

At five o'clock, the Department adjourned to meet at three o'clock to-morrow.

## SECOND SESSION.

3 O'CLOCK P.M., *July* 16, 1885.

The Department met pursuant to adjournment, Dr. Tappan in the chair.

Dr. Mowry, from the Committee on Nominations, presented a report which was adopted as follows :

*For President*, Jerome Allen, New York.
*For Vice-President*, E. W. Coy, Ohio.
*For Secretary*, E. J. James, Pennsylvania.

The committee further recommended, for the better organization of the Department, that in addition to the above officers, four others be appointed to act with them as an Executive Committee ; of whom one should be elected to serve four years, one for three years, one for two years, and one for one year ; and thereafter one should be

elected each year to serve for four years. This recommendation was adopted ; and, on the nomination of the Committee, the following were appointed :

For four years, W. A. Mowry, Massachusetts.
" three " E. E. Smith, Indiana.
" two " S. N. Fellows, Iowa.
" one " J. A. Lippincott, Kansas.

Professor Andrew F. West, of Princeton College, was then introduced, and read a paper on " The Relation of Secondary Education to the American University Problem." After the discussion of this paper, Professor S. N. Fellows, of the State University of Iowa, was introduced and read a paper on " The Practical Value of a College Education."

The papers were ordered filed for printing in the annual volume of the proceedings of the Association.

The doxology was then sung, and the Department adjourned, at 5.30 P.M.

W. G. WILLIAMS,
*Secretary.*

## *THE RELATION OF SECONDARY EDUCATION TO THE AMERICAN UNIVERSITY PROBLEM.*

BY PROFESSOR ANDREW F. WEST, PRINCETON COLLEGE.

As I purpose discussing this question in very plain and simple fashion and within strict limits, as is necessary where so many collateral matters of great interest beset the topic at every stage of its progress, I ask your attention in pursuing the following order of thought : first, what is the nature of secondary education and of universities ? second, what is the natural relation of secondary education to universities ? and third, what is the present condition and prospect for improvement in American secondary education ? and how this affects our university possibilities.

I. By secondary education I mean that middle part which lies above the common school and underneath the university. It begins where the elementary education ends and ends where the university begins. It is one kind of education to be kept separate by itself and such a kind as, when rationally administered, thoroughly fits its pupils for the higher university stage. The experience of the best educated nations abroad proves that several years are required for its proper completion. Prussia gives nine, France nine,* and England at least six, and often more. The chief feature of this grade of education is its disciplinary nature. Boys are sent to secondary schools not to study what they may chance to like from time to time, but what educated experience has shown to be best. Hence all secondary schools have definitely marked out courses of prescribed study, some one of which the pupil needs to follow continuously, or else each separate course has a separate school to whose prescribed curriculum the pupil must submit. Thus in Prussia the gymnasium has only one course and the Real-school another. In France the Lycées have one course. In England the chief public schools ordinarily have two courses, the classical and the modern. The same principle is recognized in our schools where two or three courses are offered, commonly the classical, scientific and English. This apportioning into clearly organized courses of study which pupils must pursue, instead of taking scattered studies at will, is directly and mainly intended to train and improve pupils until they are sufficiently intelligent and capable to stand alone and direct themselves, and when the exertions of the school have accomplished this end, that stage of education is completed and the next begins.

* If we exclude the Classe Preparatoire of the Lycées; otherwise, ten years.

By the university I mean that third and last stage of education, the stage of self-directed activity, where the student is free to choose what he will study and how he will study it. The main object here is not the training of men, but the advancement of knowledge. The school discipline ceases, the university freedom begins. The object of this freedom is to give young men the opportunity of doing what they know they can do best. This ability to recognize what they can do best is first gained in the secondary discipline, and the university uses all this capability and power gained from below to further its high ends of free research into all branches of knowledge and diffusion of the same among men.

II. If these general educational convictions, thus simply outlined, are true, then the relation of secondary education to universities is a matter of easy demonstration. Several things will follow inevitably:

1. In so far as secondary instruction is complete and efficient will it be possible to send to universities a steady supply of well-trained students capable of using their freedom and privileges for the accomplishment of legitimate university objects.

Completeness and efficiency in the preparatory instruction implies a force of teachers well skilled in the art of teaching, an agreement as to what are essentials in the different courses of study, a logical co-ordination of these in a curriculum, and a uniformity in actual school management sufficient to insure essential uniformity of culture throughout the schools. In so far as this is done results will appear of no heterogeneous character, but results on which we can proceed safely to build higher results. For such a work teachers who are familiar both with secondary and with university education are indispensable. In Prussia the gymnasial teachers, with few exceptions, need to be graduates both of the gymnasium and the university. The provision is most wise. The gymnasium pours its well-taught pupils, trained by gymnasial-bred and university-bred teachers, into the universities; the universities in turn qualify some of these to return and teach in the gymnasium. And so the process goes on and on. The cycle is complete, the entire system is unified, the teacher has viewed once at least the whole area of his field, forward as a gymnasial pupil and backward as a university student, before attempting to guide others. It is very clear that pupils so trained will be prepared, so far as schooling can do it, to use their university freedom for proper objects, for investigation, research, study, discovery, and the high pursuit of knowledge for its own sake. If it were otherwise, and they entered not sure of doing this with some tolerable certainty, the student-body, as a mass, would fail to show capable zeal in research, the professors would be dragged down from their high efforts and forced to suit themselves to lower ranges of intellectual elevation, and the very end for which universities exist would thereby be so far defeated. Well did

Helmholtz say, when speaking on this very matter as Rector of the University of Berlin in 1877, "If that were the case, the dangers of academic freedom would choke its blessings." *

2. In proportion to the close articulation of secondary instruction with universities will the universities actually obtain such a supply of capable students.

One of the causes most productive of educational waste is the imperfect division of work. When in any school studies either overrun or fall short of the limit at which they should end, and so leave gaps or overlappings, both of which are injurious to entrance on a higher plane of education; when in the schools themselves there are great discrepancies in studies and discipline, causing serious loss to pupils who change schools, and largely distorting what always ought to be recognizable as common features in all school training; and when, after the countless great and little wastages of this sort, their upper limit of preparation is raggedly uneven and zig-zags up and down from study to study and from school to school, it becomes impossible to set any fairly level lower limit for the beginning of university, work which ought to begin just where the school work ends. If this ends everywhere, the university is liable to begin anywhere, and no steadily distinguishable, much less rational line of demarkation can be drawn. Either the university is degraded and so far destroyed, or else if it does insist on drawing a clear high line, it must lose real university students, since the schools do not prepare them properly.

In this connection emerges a most plausible fallacy. It is that the remedy for this state of affairs is to have universities set their high requirements, and thus force up the schools by the stimulus given from above. The whole strength of such a suggestion lies in the undoubted fact that universities do and should exercise an influence on schools. The prosperity of universities helps and their distress injures schools. Schools also influence universities. The same is true in various degrees of all parts of an educational system. The good order of one part contributes to the good of every other. But the underlying consideration which rules the whole is that the lower education once completed without haste or waste, the long school course quietly pursued for the purpose of securing intellectual and moral maturity, comes before the university in natural order of growth, and when it is so pursued universities naturally follow as the logical completion of the system. For all those who believe in following natural laws of development, apart from extraordinary and spasmodic forcing, such a consideration is conclusive. But suppose we concede that universities could thus force up

* "On Academic Freedom in German Universities." Inaugural address as Rector, October 15, 1877.

the schools. What would happen when, in the vicissitudes of education, the universities lower their standards, as history informs us they have not unfrequently done? The same reasoning would force the schools down again, and their career be made to depend on university fluctuations. Surely a more solid basis for the improvement of school education should be sought.

Theorizing, however, is idle here, for we have at hand the history of such experiments elsewhere. Prussia has a great lesson for us in this matter. In the early years of the present century her universities examined gymnasial students for entrance. The actual result was a lowering of university standards because of the rivalry for students. Boys broke away from a partly-finished gymnasial course and flocked to universities. The fruit was gathered half-ripened. The universities were degraded thereby and the schools discouraged. But when Humboldt, as Minister of Education, insisted that the gymnasial course ought to be finished before entrance to universities was allowed, as the great step toward securing this wholesome result he took away from the universities the power to set their standards of entrance and lodged it in the gymnasial diploma, henceforth given by the gymnasium itself and only by the gymnasium, to such as completed its course and thereby proved their fitness to enter a university. Then began the present brilliant period of Prussian university history. The danger of abuse on the part of universities was so great that they could not be trusted to uphold and elevate schools, but did, in fact, help to injure them.

3. Apart from the completeness and efficiency of secondary schools and their close articulation with universities, we have no reason to expect that universities will be successful.

Part of this has been suggested in what has been said. There is, however, a lurking but not widely-prevalent feeling that perhaps outside of any systematic secondary school-training bright boys will grow up and in some undefined, hap-hazard way, enter and do great things at universities, and that the question is one of native ability and energy rather than of art and training. If so, such considerations are good for schools generally and would put us at once in funeral procession toward the grave of all established education. But it is not so. Such erratic cases, though moderately numerous if all collected by themselves, are but a small fraction of the mass of educable youth, and systems of education are made for the mass primarily and the others only incidentally. Apart from this small number of those who, as some fancy, will attain the desired results of culture whether schools are good or worthless, what is to become of the great mass whose school opportunities mainly determine their educational future? The question for them is vital, and must be answered by the schools. Outside these

two classes—the great mass of youth who need schools and the rather imaginary fraction of those who do not need schools—what others remain ? None. Whence, then, except from schools, can the university come as a generally established institution ?

Did time permit we might appeal to history to confirm this view. All the great and enduring university systems of the world were based and still stand on a system of secondary schools. This alone should settle the question.

III. If the foregoing views are sound, then a knowledge of the condition and prospects of American secondary instruction will be indispensable to any just estimate of American university possibilities. If our secondary education is now in essentially satisfactory shape, American universities may be founded at once. If it is still imperfect, but likely to make decided improvement, the university is approaching. If it is in a state of crude disorganization, the university is at present hopeless. Which of these is the fact, or are all in a measure true ? It is not very hard to answer. My own firm belief is that out of our three thousand or more boys' schools, there are not twenty, certainly not many more, now capable at their highest working pressure of preparing for universities. A very large number, possibly a thousand or so, can prepare moderately well for college, and another very large number are still more feeble. Let us see whether this is so. There is no better place to test the matter than in our school courses preparatory to academic departments of colleges, since these courses represent the longest established, best understood, most widely distributed and uniformly adminstered type of secondary instruction we possess. They are, moreover, better articulated than any others to the college grade of education immediately above them. They are found in several kinds of institutions, city high schools, State high schools, endowed academies, preparatory departments of particular colleges, and private schools. The age of their pupils ranges somewhere between thirteen years (the earliest usual time for beginning Latin) and nineteen or twenty. At the end of this paper there are submitted statistics, carefully gathered from over a hundred secondary schools of various sorts, and sufficient in amount and kind to furnish a good sample of what our schools profess to do in their Latin, Greek, and mathematics, the three great staples of secondary classical instruction. They show that these courses rarely exceed four years, as contrasted with the six years or more in England, seven * in France and nine in Prussia. These statistics will not lead to any underestimate of what our schools are doing. Quite the reverse. They represent the better side of their work. If the statistics for instruction in modern languages, history, elementary science and English were added, as they

* Counting from the time Latin begins.

cannot be because of their notable want of uniformity and logical co-ordination, and because of the present impossibility of determining just what they do mean, we should find that these latter studies which complete the essentials of secondary education are in a far less favorable condition than are the Latin, Greek, and mathematics. Still more we need to remember that the statistics given are catalogue professions, and may assume quite safely that while a school rarely exceeds these, most schools fall short of them. Add to this the considerable though not always vital differences between school and school, between methods, between teacher and teacher, which so often play havoc with a boy's school opportunities; consider the comparatively small number who pass through the whole school course continuously to its end, the impossibility of being sure that all this diverse teaching is sound even where it is not crude, the educational inexperience of most school trustees, and the fact that a large number of teachers are not only irregularly educated, but also teach as a make-shift for quite a short time instead of devoting their lives to their great and arduous work, and then shall we find ourselves compelled to make a decided discount on all this secondary school work. Of one thing we may be reasonably sure, namely, that school professions generally represent not the work done, but the maximum statement of the work they try to do. But let us assume, in spite of this, that they really do all the work they profess. Let us further assume—what is a very extravagant thing to do and what no college faculty in the land will admit as true—that this secondary teaching gives quite an adequate preparation for our colleges. We have still to answer the greater question: Is it sufficient for universities? Clearly not, because a university differs materially from an American college. The difference consists in the fact that the existing American college is a composite thing, the lower two years being of a gymnasial or secondary character, and the upper two years partly of a university nature. Judged by the Prussian standard, American colleges in their Freshman and Sophomore years are only the ending of an imperfect gymnasium supplemented in their Junior and Senior years by some beginnings of university work. If then at the best our secondary schools are no more than sufficient for college requirements, the additional fact that the colleges find they need to do two years more of secondary work in Freshman and Sophomore years in order to help to make good the deficiencies and incompleteness of schools, before venturing to begin any sort of university work in Junior and Senior years, simply puts two years more of disadvantage against our schools as means of preparing for universities.

But notwithstanding this showing of inefficiency the secondary schools are undoubtedly on the upward trend. The proof of this is patent to all who know how colleges have become able latterly to ask and receive more

in their admission requisites. The schools have begun to force up the colleges, and in not a few instances cover as much of a curriculum as did the college a generation ago, when its instruction was nearly all secondary. This undoubted fact, coupled with the present possession of two years of secondary teaching in the mass of our colleges, gives us the real ground for hopefulness as to the probable coming, in genuine form and power, of true universities; for if this secondary instruction now pursued in college can be relegated gradually to the schools, whither I believe it will eventually go, then our secondary instruction will be kept together instead of being broken in two between schools and colleges. Once gathered together it can be dealt with as a unit, and will be far more likely to improve than at present; and as it is really advancing, even under this present disadvantage, it will surely advance still faster when the disadvantage is removed. Then will our secondary schools begin to have a value comparable to their European rivals, and the university question will be virtually decided.

I am not here concerned to inquire whether the coming university will be, as at Oxford, a confederation of colleges with a presiding university board, or a system of scattered special faculties with an examining commission like the University of Paris, or better yet a university like Berlin, undergirded by sound gymnasial instruction, overarched by lofty ideals concerning the untiring pursuit of truth for its own sake, and all-embracing in the rigor of its degree examinations and the comprehensiveness of its manifold research. One or all or a mixture of these elements will enter here tempered by the American spirit and adapted to our social and political exigencies. But at whatever time the sum total of our secondary instruction both before and in college reaches a level of completeness and efficiency comparable in value to that strong secondary basis on which the old world universities so securely stand, then will emerge in power and stability the genuine and enduring American university. No forcing can bring it sooner and no attempted repression can delay it later. In some instances private generosity may found such institutions. In more instances colleges which are strong enough to keep rising, because their secondary bases are being built steadily upward and their two years of secondary teaching consequently drops more and more into secondary schools, will find themselves passing into virtual, though yet imperfect universities. Their then urgent task of more perfect adjustment and new equipping and enlarging of appliances and methods will fully fledge them as new-born universities of legitimate and healthy parentage, and with good hopes for long and vigorous life. Nor will it be an unhappy result if a general differentiation of colleges shall ensue, some approaching the character of efficient gymnasia, others, as suggested, coming to be universities, and still others continuing to do true work for culture as American colleges of the historic type.

Here is our hope in the present outlook. Our schools and colleges need no hand of destruction or of refoundation laid upon them. They need rearrangement and improvement on existing foundations, and on the successful solving of this imminent problem depends not only the university but also in large measure the future power of our whole education.

# APPENDIX.

## TABLES

### ILLUSTRATING THE CHARACTER OF OUR SECONDARY INSTRUCTION.

THE appended tables are compiled for the purpose of throwing some additional light upon the actual condition of our secondary instruction for boys in so far as it is preparatory to academic departments of colleges. While no complete tests can be applied at present and no fully accurate gathering of useful statistics made because of the great diversity in methods and quality of the instruction given, it is still true that there are enough facts available to show that our secondary instruction preparatory to the regular college course covers uniformly not more than four school years with quite a substantial agreement as to the proportion of school exercises given to Latin, Greek, and Mathematics—the three staples of this preparation. To this end I have aimed to make a fairly good selection of representative types of schools, City High Schools, State High Schools, endowed Academies, Preparatory Departments of particular colleges, and private boys' schools. All the statistics offered are taken from very recent catalogues and correspondence with principals, head-masters and other school officers, and while one cannot be sure of having committed no error, I know of none and am certain that there is no mistake of any importance.

In connection with these tables of American Schools there are added others showing the plan of studies for the French Lycées and the new plans for the Prussian Gymnasia and Realschulen. I have been unable to obtain general statistics for the English Public Schools. Six years of Latin and five of Greek may be assumed as their minimum, which is often exceeded.

Last of all are some extracts which explain the objects and methods followed in classical training in the Prussian Schools.

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PRINCETON COLLEGE, *July*, 1885.

# SCHOOL YEARS OF INSTRUCTION

DEVOTED BY REPRESENTATIVE AMERICAN SCHOOLS TO LATIN, GREEK AND MATHEMATICS, IN COURSES PREPARATORY FOR ADMISSION TO THE ACADEMIC DEPARTMENT OF AMERICAN COLLEGES.

NOTE. + or — indicate slightly more or less than the numbers to which they are attached.

## I. High Schools of 15 Cities.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| 1. Boston Latin School, Mass. | 6 | 3 | 6 |
| 2. New Haven, Conn. | 4 | 3 | 3 |
| 3. Albany, N. Y. | 4 | 3 | 3 |
| 4. Newark, N. J. | 4 | 3 | 4 |
| 5. Philadelphia, Pa. | 3 | 0 | 4 |
| 6. Pittsburgh, Pa. | 4 | 3 | 3 |
| 7. Cleveland, O. | 4 | 3 | 3 |
| 8. Cincinnati, O | 4 | 3 | 3 |
| 9. Indianapolis, Ind | 3 | 2 | 2 |
| 10. Louisville, Ky. | 4 | 4 | 4 |
| 11. Chicago, Ill. | 4 | 0 | 2 |
| 12. Detroit, Mich. | 4 | 3? | 4 |
| 13. Milwaukee, Wis. | 4 | 0 | 2 |
| 14. St. Louis, Mo. | 4 | 3 | 4 |
| 15. San Francisco, Cal. | 3 | 2 | 3 |
| Average years of *Latin* | 4— | | |
| Average years of *Greek* (Excluding Philadelphia, Chicago, and Milwaukee.) | | 3— | |
| Average years of *Mathematics* | | | $3\frac{1}{3}$ |

## II. 7 Endowed Eastern Academies.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| 1. Phillips Exeter, N. H. | 4 | 3 | 4 |
| 2. *St. Paul's, Concord, N. H. | 5* | 4* | 5* |
| 3. St. Johnsbury, Vt. | 4 | 2 | 3 |
| 4. Williston Seminary, Mass. | 4 | $2\frac{2}{3}$ | $3\frac{1}{3}$ |
| 5. Phillips Andover, Mass. | 4 | 3 | 4 |
| 6. Hopkins Grammar, New Haven, Conn. | 5 | 3 | 4 |

* Estimated to be substantially like Phillips' Exeter, with more time on the rudiments of Greek and Latin.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| 7. Lawrenceville School, N. J. | 4 | 3 | 4 |
| Average years of *Latin* | 4+ | | |
| Average years of *Greek* | | 3 | |
| Average years of *Mathematics* | | | 4— |

### III. 28 Preparatory Departments of Western Colleges.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| 1. Baldwin University, O. | 2 | 2 | 3 |
| 2. Denison University, O. | 3 | 2 | 3 |
| 3. Hiram College, O | 2 | 2 | 1⅓ |
| 4. Harcourt Place Academy, O. | 3½ | 2½ | 4 |
| 5. Kenyon Grammar School, O | 3 | 2 | 4 |
| 6. Oberlin College, O | 3 | 2 | 3 |
| 7. Ohio State University, O. | 3 | 2 | 3 |
| 8. Ohio Wesleyan University, O. | 3 | 2 | 3 |
| 9. Otterbein University, O | 3 | 2 | 3 |
| 10. University of Wooster, O. | 3 | 2 | 3 |
| 11. Adrian College, Mich. | 3 | 2 | 3 |
| 12. Hillsdale College, Mich. | 3 | 2 | 3 |
| 13. Fort Wayne College, Ind. | 3 | 1½ | 4 |
| 14. Whipple Academy, Ill. | 3 | 2 | 2⅔ |
| 15. Knox College, Ill | 3 | 2 | 3 |
| 16. Lake Forest University, Ill. | 3 | 2 | 3 |
| 17. Lombard University, Ill. | 2 | 1⅔ | 1 |
| 18. Monmouth College, Ill. | 3 | 1 | 3 |
| 19. Northwestern University, Ill. | 3 | 2 | 2 |
| 20. St. Charles College, Mo | 1 | 1 | 2? |
| 21. Washington University, Mo | 5 | 3 | 6 |
| 22. Coe College, Iowa | 2⅓ | 1 | 3⅓ |
| 23. Iowa College, Iowa. | 2 | 2 | 1 |
| 24. Parsons College, Iowa. | 3 | 2 | 3 |
| 25. Kansas University, Kansas | 2 | 2 | 1½ |
| 26. Hastings College, Neb. | 2 | 1⅔ | 1⅔ |
| 27. University of Nebraska. | 2 | 1 | 2 |
| 28. Pres. Un. S. Dakota, Dak. | 3 | 1½ | 2 |
| Average years of *Latin* | 2¾ | | |
| Average years of *Greek* | | 1¾ | |
| Average years of *Mathematics* | | | 2¾ |

### IV. State High Schools Preparing for State Universities.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| Michigan High Schools (about 20). | 4 | 2 | 4 |
| Minnesota High Schools (about 20) | 3 | 0* or 2 | 3 |

* As about two years Greek is required for regular entrance to the classical course of the University, though the High Schools need furnish none; it is counted as two years in the averaging.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| Kansas High Schools (nearly 20) | 3 | 2 | 3 |
| Average years of *Latin* | 3 | | |
| Average years of *Greek* | | 2 | |
| Average years of *Mathematics* | | | $3\frac{1}{3}$ |

### V. Various Private Schools.

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| 1. Chauncy Hall, Boston, Mass | 6 | 4 | 6? |
| 2. Cushing Academy, Mass. | 4 | 3 | $2\frac{1}{2}$ |
| 3. Dummer Academy, Mass | 4 | 3 | 4 |
| 4. Greylock Institute, Mass. | 4 | 3 | 4 |
| 5. Highland Mil. Academy, Mass | 4 | 3 | 3 |
| 6. Lenox Academy, Mass. | 4? | 4? | 4? |
| 7. Wesleyan Academy, Mass | 4 | 3 | 3 |
| 8. West Newton Classical School, Mass | 4 | 3 | 4 |
| 9. Berkeley School, Providence, R. I. | 6 | 3 | 6 |
| 10. Friends' Boarding School, R. I. | 4 | 3 | $2\frac{1}{2}$ |
| 11. Greenwich Academy, R. I | 3 | 2 | 2 |
| 12. Black Hall School, Conn. | 5 | 4 | 5 |
| 13. Collegiate Institute, New Haven, Conn. | 4? | 3? | 4? |
| 14. Conn. Lit. Institute, Hartford, Conn. | 4 | 3 | 4 |
| 15. Morgan High School, Clinton, Conn. | 4 | 3 | 4 |
| Average 15 New England Schools in *Latin* | $4\frac{1}{4}$ | | |
| Average 15 New England Schools in *Greek* | | 3 | |
| Average 15 New England Schools in *Mathematics* | | | 4— |
| 1. Arnold School, New York, N. Y. | 4 | 3 | 4 |
| 2. Berkeley School, New York, N. Y | 6 | 3 | 6 |
| 3. Cayuga Lake Academy, Aurora, N. Y | 4 | 3 | 3 |
| 4. Claverack College, Claverack, N. Y. | 3 | 3 | 3 |
| 5. Colgate Academy, Hamilton, N. Y | 3 | 2 | 3 |
| 6. Cook Academy, Havana, N. Y. | 4 | 3 | 2 |
| 7. Cornwall Heights School, N. Y. | 5 | 4 | 6 |
| 8. Fort Edward Institute, N. Y. | 3 | 3 | 3 |
| 9. Hudson Academy, N. Y. | 3 | $2\frac{1}{2}$ | 3 |
| 10. Irving Institute, Tarrytown, N. Y. | 4 | 3 | 4 |
| 11. Jamestown Union School, N. Y. | 3 | 2 | $1\frac{1}{2}$ |
| 12. N. Y. Latin School, N. Y. | 6 | 3 | 6 |
| 13. Polytechnic Institute, Brooklyn, N. Y. | 3 | 2 | 3 |
| 14. Riverview Academy, N. Y. | 4 | 3 | 3 |
| 15. Siglar's Prep. School, Newburgh, N. Y. | 4 | 3 | 4 |
| 16. Staten Island Academy, N. Y. | 6 | 4 | 6 |
| Average 16 New York Schools in *Latin* | 4+ | | |
| Average 16 New York Schools in *Greek* | | 3— | |
| Average 16 New York Schools in *Mathematics* | | | $3\frac{3}{4}$ |

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| 1. Blair Presb. Academy, N. J. | 4 | 3 | 4 |
| 2. Bordentown Military Institute, N. J. | 4 | 3 | 4 |
| 3. Newton Collegiate Institute, N. J. | 4 | 3 | 4 |
| 4. Peddie Institute, N. J. | 3 | 2 | 3 |
| 5. Pennington Seminary, N. J. | 3 | 3 | 3 |
| 6. Preparatory School, Princeton, N. J. | 4 | 2 | 4 |
| 7. Chester Academy, Pa. | $2\frac{2}{3}$ | 2 | 2 |
| 8. Germantown Academy, Pa. | 6 | $3\frac{1}{3}$ | 6 |
| 9. Hill School, Pottstown, Pa. | 4 | 3 | 4 |
| 10. Martin's Class. School, Philadelphia, Pa. | 6 | 3 | 6 |
| 11. N. Broad St. School, Philadelphia, Pa. | 4 | 3 | 4 |
| 12. Selwyn Hall, Reading, Pa. | 4 | 3 | 4 |
| 13. Wilkesbarre Academy, Pa. | 4 | 3 | 4 |
| 14. Wyoming Seminary, Kingston, Pa. | 3 | 2 | $2\frac{1}{3}$ |
| 15. Brooks School, Cleveland, O. | 7 | 3 | 7 |
| 16. Training School, Oxford, O. | 3 | 2 | 3 |
| 17. Allen's Academy, Chicago, Ill. | 5 | 3 | 5 |
| 18. Harvard School, Chicago, Ill. | 5 | 3 | 5 |
| 19. Morgan Park Academy, Chicago, Ill. | 3 | 2 | 3 |
| 20. River Forest Institute, Chicago, Ill. | 4 | 3 | 4 |
| Average 20 Schools in Middle and Western States in *Latin* | 4+ | | |
| Average in *Greek* | | $2\frac{3}{4}$ | |
| Average in *Mathematics* | | | 4+ |
| Average for all 51 *various Private Schools* in *Latin* | 4+ | | |
| Average for all 51 *various Private Schools* in *Greek* | | 3— | |
| Average for all 51 *various Private Schools* in *Mathematics.* | | | 4— |

**Recapitulation.**

| | SCHOOL YEARS OF LATIN. | GREEK. | MATH. |
|---|---|---|---|
| I. City High Schools | 4— | 3— | $3\frac{1}{3}$ |
| II. Eastern Endowed Academies | 4+ | 3— | 4— |
| III. Prep. Schools to Western Colleges | $2\frac{3}{4}$ | $1\frac{3}{4}$ | $2\frac{3}{4}$ |
| IV. State High Schools | $3\frac{3}{4}$ | 2 | $3\frac{1}{3}$ |
| V. Various Private Schools | 4+ | 3— | 4— |
| *Average of All* | $3\frac{3}{4}$ | $2\frac{1}{2}$ | $3\frac{1}{2}$ |

NOTES.—1. The number of exercises per week allotted Latin is ordinarily 5, Greek 5, and Mathematics 4 or 5. There is no great divergence from this. The length of an exercise does not exceed an hour, and may be estimated approximately at forty to forty-five minutes.

2. The value of the tabulated numbers is on the whole very great for Latin and Greek, as the numbers include all Latin and Greek preparatory to college. But in Mathematics allowance must be made for a disturbing factor which does not operate in the case of Latin and Greek. That factor is the extent of mathematical study antecedent to the stage of education represented by these tables.

## PLAN OF STUDIES FOR THE

### Secondary Classical Schools of France (Lycées and Colléges).

Compiled from the "*Plan d'Etudes et Programmes pour l'Enseignement Secondaire Classique,*" issued by the Minister of Public Instruction, in 1880.

The numbers indicate exercises per week. Each *Classe* occupies one year, the complete course requiring ten years. Age at graduation, about eighteen years.

| STUDIES. | DIVISION ELEMENTAIRE. | | | DIVISION DE GRAMMAIRE. | | | DIVISION SUPERIEURE. | | | | Total for Each Study. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Classe Préparatoire. | Classe de Huitième. | Classe de Septième. | Classe de Sixième. | Classe de Cinquième. | Classe de Quatrième. | Classe de Troisième. | Classe de Seconde. | Classe de Rhétorique. | Classe de Philosophie. | |
| French, 9 years | 10 | 10 | 8 | 3 | 3 | 3 | 3 | 4 | 5 | — | 49 |
| Latin, 7 years | — | — | — | 10 | 10 | 6 | 5 | 4 | 4 | 1 | 39½ |
| Greek, 5 years | — | — | — | — | — | 6 | 5 | 5 | 4 | | 20½ |
| History and Geography, 10 years | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 36 |
| Mathematics and Science, 10 years | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 5 | 9 | 42 |
| English *or* German, 10 years | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 1 | 30 |
| Philosophy | — | — | — | — | — | — | — | — | — | 8 | 8 |
| Drawing | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 20 |
| Total Exercises per Week. | 24 | 24 | 22 | 24 | 25 | 25 | 25 | 25 | 27 | 24 | |

## PLAN OF STUDIES FOR THE

### Prussian Gymnasium.

IN FORCE SINCE 1882.*

Average age of pupils at graduation, nineteen years.
Length of course of study, nine years.

The numbers indicate exercises per week.

| STUDIES. | SEXTA. | QUINTA. | QUARTA. | UNTER-TERTIA. | OBER-TERTIA. | UNTER-SECUNDA. | OBER-SECUNDA. | UNTER-PRIMA. | OBER-PRIMA. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|
| Religion | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 19 |
| German | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 21 |
| Latin | 9 | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 77 |
| Greek | — | — | — | 7 | 7 | 7 | 7 | 6 | 6 | 40 |
| French | — | 4 | 5 | 2 | 2 | 2 | 2 | 2 | 2 | 21 |
| History and Geography | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 28 |
| Mathematics | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 34 |
| Natural History | 2 | 2 | 2 | 2 | 2 | — | — | — | — | 10 |
| Physics | — | — | — | — | — | 2 | 2 | 2 | 2 | 8 |
| Writing | 2 | 2 | — | — | — | — | — | — | — | 4 |
| Drawing | 2 | 2 | 2 | — | — | — | — | — | — | 6 |
| Total Exercises per Week | 28 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | |

* In the edition of the *Berlin Opinion*, published by Ginn & Heath, the gymnasial plan of studies is given, but it is the old plan previous to the revision of 1882.

## PLAN OF STUDIES FOR THE

**Prussian Realgymnasium,** commonly known as the **Realschule.**

IN FORCE SINCE 1882.

Average age of pupils and length of course of study the same as for the *Gymnasium.*

The numbers indicate exercises per week.

| STUDIES. | SEXTA. | QUINTA. | QUARTA. | UNTER-TERTIA. | OBER-TERTIA. | UNTER-SECUNDA. | OBER-SECUNDA. | UNTER-PRIMA. | OBER-PRIMA. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|
| Religion | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 19 |
| German | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 27 |
| Latin | 8 | 7 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 54 |
| English | — | — | — | 4 | 4 | 3 | 3 | 3 | 3 | 20 |
| French | — | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 34 |
| History and Geography | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 30 |
| Mathematics | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 44 |
| Natural History | 2 | 2 | 2 | 2 | 2 | 2 | — | — | — | 12 |
| Physics | — | — | — | — | — | 3 | 3 | 3 | 3 | 12 |
| Chemistry | — | — | — | — | — | — | 2 | 2 | 2 | 6 |
| Writing | 2 | 2 | — | — | — | — | — | — | — | 4 |
| Drawing | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 18 |
| Total Exercises per Week | 28 | 30 | 30 | 32 | 32 | 32 | 32 | 32 | 32 | |

## THE PRINCIPLES AND METHODS GOVERNING CLASSICAL INSTRUCTION IN PRUSSIA.

The Prussian Gymnasium is certainly the most successful intellectual training school yet organized. Whatever be the reasons for this, whether inherent or accidental, or a mixture of both, its discipline and equipment is as thoroughly arranged as is that of the Prussian army.

A nine years school course at the rate of thirty exercises per week for boys averaging from ten to nineteen years of age ; a corps of three thousand gymnasium-trained and university-trained teachers and not far from seventy-five thousand pupils ; a complete articulation with the University ; a curriculum where nearly half the whole time goes to Latin and Greek, nine years Latin and six years Greek, and a long record of unbroken success ; these are some of the Gymnasium's most obvious features.

From 1856 to 1881, twenty-five years, no comprehensive revision or restatement of its curriculum was attempted. By April, 1882, however, the whole scheme of secondary education had been reviewed, and shortly after that time a new programme of studies went into effect. The revision of 1882, which is simply the old plan of studies more perfectly adjusted, now governs all Prussian gymnasia.

I append translated extracts from the ministerial circular containing the new regulations, so far as they affect the principles and methods of classical instruction in Prussia. They speak with no uncertain utterance, and if we wish to hold before ourselves a noble and elevated conception of what classical instruction might yet become in our own country, we can do no better than consult this authoritative exposition of the convictions which govern the best classical schools of the world.

The extracts are taken from the *Centralblatt für die gesammte Unterrichts-Verwaltung in Preussen*, April, 1882, pp. 246, 250–52.

### I. Gymnasial Instruction in Latin.

1. *Desired Results and Methods* (*p.* 246).

(*a.*) Familiarity in the Latin etymology and syntax. Acquisition of a vocabulary sufficient for understanding the writings of the classical period (in so far as they are not of specifically technical content) as a sure possession for use in later professional studies and as a foundation for understanding the modern languages derived from Latin.

(*b.*) Reading of a selection of the most important works of classical literature adapted to the pupil's degree of culture. This reading, based upon a grammatically exact knowledge, is to lead to a conception and appreciation of the thought-content and literary form.

(*c.*) Readiness in writing Latin (within the sphere of thought limited by the circle of reading) without great incorrectness and with some facility.

2. *Explanation of these Provisions* (*pp.* 250–252).

(*a.*) In regard to the end to be attained in the knowledge of language, argument is not needed to justify the provision that no lower stress is to be laid upon the acquisition of a sufficient vocabulary than upon grammatical familiarity. Moreover, it is especially through this firm possession of a vocabulary once acquired that satisfaction in the progressive facility in reading is attained, and the occupation of mind with this reading extends its effect beyond the school course.

(*b.*) The task of the Gymnasium is not, however, to be regarded as fulfilled by the

fact that its students are able to read writings of any clearly indicated degree of difficulty. Much rather must we lay stress upon the fact that and how they have really read a certain circle of writings.

In regard to the method of reading two aspects must be held in view—first, it must be founded on linguistic exactness, and second, it is to lead to a conception of the thought-content and the artistic form. From the former side of treatment results the disciplinary influence of this instruction. From the latter results the beginning of that development, which in its perfection is called classical culture. A treatment of the reading which neglects rigorous exactness in grammatical and lexical knowledge leads to superficiality in general. A treatment which makes the acquisition of grammatical and lexical knowledge the end of reading, mistakes an essential basis upon which the right of Latin instruction to a place in the gymnasium reposes. We must point with special emphasis to this latter error through which both the devotion of students to their employment with the ancient languages and also the regard of thoughtful friends of the gymnasium for its requirements are endangered for the reason that, in not a few cases, the explanation of the classics, even in the highest classes, is changed into a mere repetition of grammatical rules and an accumulating of stylistic and synonymic observations. * * * * * * * * * * * * * * * *

The firm impression on the mind through memory of eminently important passages out of the classical, especially the poetical literature, forms a valuable possession for life. Yet in the selection of the tasks for this purpose the school needs to observe a most careful moderation.

(*c*.) The exercises in writing Latin are an indispensable means, in the lower and middle classes, toward the firm acquisition of grammar and vocabulary.

(Here follows an argument showing that the attempt to have pupils in the upper classes learn to *speak* Latin as well as write it is an unattainable and useless task in our day. The argument for Latin composition is then resumed as follows :)

But it does not follow from this that written exercises in the use of the Latin language have to cease, but that they can be required to produce a mastery of the language only within the vocabulary and sphere of thought opened by the reading. When thus turning to account the reading, exercises in writing Latin, translations into Latin, and Latin essays give, as experience shows, the most important contribution to the deepening of the reading both as regards the language and the thought-content. Within the limits indicated Latin essays are maintained as an integral part of instruction in the upper classes.

Practice in the oral use of Latin for the purpose of reviewing and putting what has been read to various uses * * * is fitted to promote a ready mastering of a definite vocabulary and to support materially the writing in Latin. Attempts at translation into Latin of passages taken from modern writers have, if well conducted, a value in that they lead to the precise understanding of thoughts expressed in modern form and to an estimation of the means of expression of the Latin language.

### II. Gymnasial Instruction in Greek.

#### 1. *Desired Results and Methods* (*p.* 246).

Familiarity with the Attic etymology and acquaintance with the etymology of the Epic dialect. Knowledge of the chief rules of syntax. Acquisition of a sufficient vocabulary. A reading, comprehensive in proportion to the time available, of the most important of the classic poetic and prose literature, and such a reading as is fitted

to produce a lasting impression of the value of Greek literature and of its influence on the development of modern literatures.

2. *Explanation of these Provisions* (*p.* 252).

The remarks made concerning the Latin instruction in regard to the equal value of the two sides of linguistic knowledge, the grammatical and lexical with the written exercises of the earlier half of the time of instruction, and the requirements concerning the explanation of classical reading, the choice of subjects for the reading, and the limits of the task for memorizing apply equally well to the Greek language.

The instruction in Syntax, which in some gymnasia, especially during the last two decades, has received a most minute treatment, is to be confined to the clear insight into the principal laws and to their firm impressment on the mind. The written exercises in the second half of the time for instruction also have in view only the securing of grammatical thoroughness in reading by means of strengthening the knowledge of etymology and by familiarizing the pupil with the fundamental principles of syntax. In *Prima* only one of the six weekly lessons is to be given to grammatical review and written exercises combined. The other five are to be devoted to reading. The exercise of reading, when correctly treated, finds a natural support in that attractive power which Greek literature exercises on youth who are capable of culture.

## THE PRACTICAL VALUE OF A COLLEGE EDUCATION.

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It is frequently affirmed that "College Education don't pay"—"Colleges are not practical."

A late educational journal (*The Practical Teacher*) says: "In truth, except a skinned eel or a boiled lobster, few things are worse prepared for the struggle of life than the average graduate." Colonel R. G. Ingersoll says: "You have no idea how many men education spoils. Colleges are institutions where brickbats are polished and diamonds dimmed."

In this investigation, we will first divide the classes between whom comparison is to be made.

*First Class.*—Those *known* to have graduated from some college or collegiate department of a university. We do not here distinguish between colleges, as to whether they are large or small, strong or feeble, but include generally all institutions authorized to grant baccalaureate degrees. Nor do we distinguish between courses of study, whether classical or scientific, though we should not disguise the fact that, probably, nine-tenths of those who have graduated from American colleges during the last one hundred years, pursued the regular classical course and received the degree of Bachelor of Arts.

*Second Class.*—This comprises at least seven subordinate classes:

1. All who have taken only a partial course in college.
2. Those who graduated *only* from secondary schools.
3. Those who have graduated *only* from technical and professional schools, not having taken a previous collegiate course.
4. All instructed by private tutors.
5. Those possessing *only* an elementary education.
6. The wholly illiterate.
7. All those of whom nothing is known as to their early educational advantages.

It is doubtless true that some of the last class were college graduates. It is also well known that many of the first class completed the junior, and even a part of the senior year, thus securing much of the discipline and spirit of the college as potent factors in their subsequent lives; but as this is an indeterminate element, and we desire to give colleges credit only for what is known to be their due, we draw the line sharply at

graduation, and thus secure two distinct classes for comparison, viz.: college graduates and non-college graduates.

In the outset, we cheerfully grant that a college education is not absolutely essential to the highest success. Washington, Franklin, Stevenson, and Lincoln were not college-trained men, and none have surpassed them in their respective fields of labor. Here and there, a rare genius, ignoring beaten paths and means necessary to ordinary mortals, apparently by his own unaided efforts, outstrips all others in reaching the goal. But not one in ten thousand is a genius, and we can derive no law from exceptions. The practical question is, not whether it is possible to gain the highest, or even a high degree of success without a course in college, but what are the probabilities? Will a college course increase the chances of success, and if so, how much?

The facts given in this paper have been gathered chiefly from the following sources, viz.:

1. *The U. S. Census Reports* for 1870 and 1880.
2. *The Reports of the Commissioner of Education.*
3. *Lanman's Biographical Dictionary.*
4. *Drake's Dictionary of American Biography.*
5. *Barnes' History of Congress.*

From the *Census Report* for 1870, vol. iv., page 610, we learn that the number of white males between the ages of eighteen and twenty-one (the four years of usual college life) was in round numbers, 1,345,000, or about three and one-half per cent. of the entire population.

From the *Report* of the Commissioner of Education for 1872, we find that the number of collegiate degrees conferred that year upon young men, was eighteen hundred and four. Multiplying the number receiving degrees that year by four, we obtain the number of young men then in college who completed the course to graduation, viz.: seven thousand two hundred and sixteen. Uniting these results, we reach the following conclusion:

Total number of young men in the United States in 1870, between the ages of eighteen and twenty-one, one million three hundred and forty-five thousand. Of these there graduated from college, seven thousand two hundred and sixteen—or, one in one hundred and eighty-five, or a little over one-half of one per cent. From the *Census Report* for 1880, we obtain the following estimates: Total population, 50,155,783.

Three and one-half per cent. of the above equals the probable number of males between the ages of eighteen and twenty-one, viz.: 1,755,452. From the *Report* of the Commissioner of Education for the same year, estimating as before, we learn that the number of young men then in college who completed the course to graduation was twelve thousand eight hundred and seventy-six—or, one in one hundred and thirty-seven, or about three-fourths of one per cent.

Two reasons may be assigned for the differences in the results reached from the reports of 1870 and 1880. The first is that more reliable statistics may have been gathered of graduates in 1880.

The second reason is that the ratio of graduates to population probably increased during the decade. It is believed, however, that if we consider the entire period of our country's history, the ratio of graduates to population will fall below that of 1870, rather than go above it. We shall, therefore, take as the basis of our future estimates, one-half of one per cent. of the young men of our country as college graduates, and ninety-nine and one-half per cent. of them as non-college graduates.

Let us now inquire for the relative part that these two classes have enacted and the relative success each has gained in the affairs of our country. If a college education is of no advantage or practical value, then it will appear that only about one-half of one per cent. are college graduates in all positions of honor and trust. We will examine first the American Congress, perhaps the most unpropitious field for our inquiry. For examples, we take the fortieth, forty-first, and forty-second Congresses, which were held during the years from 1867 to 1873.

FORTIETH CONGRESS.

| NUMBER OF MEMBERS. | KNOWN COLLEGE GRADUATES. | PER CENT. OF COLLEGE GRADUATES. |
|---|---|---|
| United States Senate ..... 53 | 25 | 47 |
| House of Representatives .....198 | 61 | 32 |

FORTY-FIRST CONGRESS.

| | | |
|---|---|---|
| United States Senate ..... 72 | 33 | 46 |
| House of Representatives..... 239 | 75 | 31 |

FORTY-SECOND CONGRESS.

| | | |
|---|---|---|
| United States Senate ..... 74 | 34 | 46 |
| House of Representatives .....243 | 77 | 32 |

If the above three Congresses may be taken as fair examples of all, and we know of no reason why they may not be so taken, then it appears that one-half of one per cent. of our young men whom we have called college graduates, furnish thirty-two per cent. of the National House of Representatives, and forty-six per cent. of the United States Senate; while ninety-nine and one-half per cent. of our young men who are non-graduates supply sixty-eight per cent. of the House of Representatives and fifty-four per cent. of the Senate.

In preparing the following list of national officers, we have gone over the entire period of our country's history.

| | WHOLE NUMBER. | KNOWN COLLEGE GRADUATES. | PER CENT. OF COLLEGE GRADUATES. |
|---|---|---|---|
| Presidents of the United States | 17 | 11 | 65 |
| Vice-Presidents of the United States | 20 | 10 | 50 |
| Secretaries of State | 29 | 19 | 65 |
| " Treasury | 33 | 16 | 48 |
| " War | 31 | 19 | 61 |
| " Navy | 30 | 14 | 47 |
| " Interior | 14 | 7 | 50 |
| Attorneys-General | 38 | 21 | 53 |
| Postmasters-General | 30 | 16 | 53 |
| Speakers of House of Representatives | 26 | 16 | 61 |
| Associate Judges of U. S. S. C | 41 | 30 | 73 |
| Chief-Justices of U. S. S. C | 6 | 5 | 83 |
| Total | 315 | 184 | 58 |

It will be seen that one-half of one per cent. of the young men who are known to have been college graduates, have filled fifty-eight per cent. of the above federal offices, since the beginning of our country's history; and ninety-nine and one-half per cent. of them, who have been non-college graduates have gained only forty-two per cent. of the same offices during the same period. Such are the facts as given in official reports in regard to number and success of college graduates in the United States civil service.

We will illustrate the above according to the doctrine of chances. Suppose we take an average one hundred thousand young men. According to the statistics given, one-half of one per cent., or five hundred of them are college graduates, and ninety-nine and one-half per cent., or ninety-nine thousand and five hundred of them are non-college graduates. Suppose again, that one hundred of the above-named United States offices are to be distributed as prizes in a lottery. Fifty-eight of these offices would be distributed among the five hundred college graduates, and forty-two among the ninety-nine thousand and five hundred non-college graduates. The chances of the graduates for a prize would be *one in nine*—the chances of the non-graduates for a prize would be *one in two thousand one hundred and thirty*. The chances of the graduates to those of the non-graduates would be as *two hundred and thirty-six to one*. Unless some other cause can be shown for this remarkable success of college graduates, the strong presumption is that it is due to college training.

Let us now turn to the professions. From a paper recently read before the American Academy of Medicine in Philadelphia, by Dr. Charles McIntyre, Jr., of Lafayette College, we obtain the following statistics, showing the per cent. of college graduates who enter the professions of law, medicine and theology. These statistics cover the period from 1825 to 1880 and were gathered from fifty-eight of the older and larger colleges of the United States.

| NO. OF COLLEGES. | WHOLE NO. OF ALUMNI. | ENTERED LAW. | ENTERED MEDICINE. | ENTERED THEOLOGY. |
|---|---|---|---|---|
| 58 | 38.054 | 19.7% | 9.2% | 26.2% |

The above is confirmed by the reports from professional schools to the Commissioner of Education for the years 1879 and 1880, in which is given the number of professional students enrolled who have previously graduated from college, as follows :

| | 1879. | 1880. |
|---|---|---|
| Law | 25.2% | 24.1% |
| Medicine | 8.2% | 7.9% |
| Theology | 30.6% | 26.4% |

It is well known that many enter the above professions without attending professional schools, and it is believed that the per cent. of college graduates in each of the professions will fall below, possibly much below, the estimates above given. But if statistics could be obtained, we have strong presumptive grounds for believing that as in political so in professional life, this small per cent. of college men form the large majority in the upper and front ranks in each profession.

Again, if we enter our largest organized industries, it is believed that similar facts and results will appear. We will find, for instance, in a great railway corporation, that the ordinary laborers and under officials are trained chiefly in details—"trained in the business for the business"—in that which may almost be termed mechanical, and have thus become fitted for their subordinate positions. But if we go higher and inquire for the men of directive intelligence, who with keen and far-sighted vision look over this great land and send out lines and branches of railway running west and north-west and south-west, that seem like great iron fingers extended to grasp in their embrace the entire continent, we shall find that they—the men who organize, direct and control these marvelous enterprizes—are men whose practical education consists, not so much in "the education of the hand to skill as of the brain to directive intelligence." They are men of trained minds, disciplined intellects, obtained it is believed in a majority of cases in the college or university.

A re-examination of our facts and figures will reveal another general truth or law that should not be overlooked ; and that is this, that among the positions of honor and honorable success in life, the per cent. of college graduates who gain them increases in proportion as the office or place is higher or more important. Thus :

| | | |
|---|---|---|
| House of Representatives | 32% | are Graduates. |
| United States Senate | 46% | " " |
| Vice-Presidents of United States | 50% | " " |
| Speakers of House of Representatives | 61% | " " |
| Presidents of United States | 65% | " " |
| Associate Justices of S. Court | 73% | " " |
| Chief-Justices of United States | 83% | " " |

May we not safely estimate the worth and dignity of the above offices by the per cent. of college graduates who have occupied them?

Again, it is well-known that in every assembly of men, whether legislative, political, secular, or religious, there are a few men who are its leaders and frame its platforms or shape its legislation. Go to the American Congress during the period from 1860 to 1870. Who were its leaders, and what per cent. of them were college graduates? We will not attempt to give the per cent., but will name some of the men who were graduates:

Allison, Anthony, Blaine, Butler, Doolittle, Fessenden, Frelinghuysen, Garfield, Grimes, Harlan, Hendricks, Saulsbury, Stevens, Sumner, Voorhees, Yates, and others, all college graduates. And if we should include those who had taken a partial course in college and gained its inspiration, we would add the names of Chandler, Conklin, Edmunds, Morgan, Morrill, Morton, Boutwell, and others.

It may be affirmed that Abraham Lincoln was not a graduate. Granted! Cheerfully granted! But who were his counsellors, the members of his Cabinet during the stormy days of the Rebellion? All the leaders in that Cabinet were college-trained men. Wm. H. Seward, the shrewed diplomatist, who held other nations at bay until the rebellion was throttled. Salmon P. Chase, whose fertile brain developed a financial system whereby our nation was saved from national bankruptcy, and our national bonds became as good as the gold in foreign markets. Edwin M. Stanton, that man of iron, who organized a million of raw recruits into an army equal to any in the world. Gideon Welles, who almost from nothing created a navy sufficient for our needs. Each of these and every other member of Lincoln's Cabinet, save one, was a college graduate. So also in the army. It was not till thoroughly trained and disciplined men filled the chief places in command, that the Federal forces overwhelmed and destroyed the Rebellion. We repeat, the law is, and it is believed to be universal, that the higher the rank or position, the larger the per cent. of college graduates who occupy it.

It is evident to all careful observers that college students, under the stimulating influence of college life, grow more rapidly, mature earlier, and reach eminence in the State and in the nation sooner than the non-college student or graduate. Indeed, it is estimated that graduates attain

a position and success at thirty-five years of age, which non-graduates do not reach until they are forty-five.

If this observation be correct, then a college training virtually adds ten years to a man's life—ten years, not of childhood or of dotage, but of vigorous manly life. The college graduate having ten years more in which to grow and labor, easily rises to the highest positions and bears away the brightest honors.

The facts presented in this paper teach us that mind is a vital force in all human activity—that it is "the forecast and insight of disciplined intellect, not brute muscle that accumulates the treasures and bears away the honors of the world," and that collegiate training tends to secure such a discipline. Not that a college education can transform mediocrity into genius, or brickbats into diamonds. But it can and does polish diamonds, and at the same time it molds and shapes even brickbats so that they become more serviceable in the building of national character.

The reasons are obvious. For four years, and under the guidance and inspiration of learned teachers, college students pursue a course of study and discipline which the wisdom of centuries has devised and improved for the complete and harmonious development of all the mental and moral powers. Such a training in language, mathematics, science, and philosophy tends to develop the power of consecutive and continuous thought—mental grip upon difficult questions—concentrated attention, sustained and patient effort; and teaches that success is sure if waited for and labored for.

It develops habits of industry, self-control and indefatigable application, before which obstacles crumble and difficulties vanish. It accustoms one to long and laborious effort for the attainment of an end. It trains him in the habit of methodizing what he learns and digesting what he reads. The inspiration that springs from four years of communion with "the greatest thoughts of the greatest men of all times," elevates the aspirations, enlarges the horizon of mental vision, and therefore tends to prevent what has been called "the dry rot of partial development" and "the intolerant self-sufficiency of the so-called practical man," and increases the capacity for professional intensity without professional narrowness and bigotry. It prepares one to look beyond the narrow boundaries of his own vocation, and to grasp in his conceptions and sympathies the multiform needs and interests of society, and therefore he becomes of more value to himself and the world. It makes a man more thoroughly master of himself, and fits him for the best mastery of any specific calling he may choose.

Such discipline, such power can be put to immediate and valuable use in any and every department of human activity, and the technical and

specific training that may be needed will soon and easily be acquired. Given such a development of mind and character, and only an opportunity is needed to insure success in any vocation. Nor is this in the above cases usually wanting. For while a college or university cannot guarantee employments to its graduates, it is more or less an intelligence office to its alumni, and a reliable source of reference for employers seeking the services of competent, ambitious, and worthy young men. It is no cause for surprise, then, that with such help, such training, such incentives and such opportunities, one-half of one per cent. of our young men who have graduated from college, have borne away so large a percentage of the lucrative and honor prizes of our country. If this has been so in the past, when schools were few and the demands upon industrial, professional, and political leaders were comparatively light, still more will it be true in the future. Those who aspire to be leaders in any industrial or professional calling, in social or political life, owing to the greater demands laid upon them, must, in the coming time more than in the past, possess a broad and liberal culture as well as technical and special training—such a culture as only colleges and universities can give.

A college education is a safe as well as a profitable investment. It cannot be carried away by robbers, sold under a mortgage, destroyed by fire or tornado, and is sure to repay in large dividends. But this is not all. Wealth and honor are good if rightly used—good, if sought for not as ends, but as means—means to a higher end. And a higher education pays if it brings to its possessor only material success. It does this and more ; aye, almost infinitely more. It tends to heighten intellectual enjoyments, enhance social influence, increase personal refinement, awaken purer aspirations, and develop a nobler manhood.

## SUMMARY.

### THE PRACTICAL VALUE OF COLLEGE EDUCATION.

1. The two classes compared :

*a.* College graduates.

*b.* Non-college graduates.

2. Official statistics show :

*a.* That college graduates include about one-half of one per cent. of the young men of our country.

*b.* That these college graduates have filled fifty-eight per cent. of the chief national offices during the past one hundred years.

3. The same results appear in the professions and organized industries.

4. It also appears that the higher the rank or position, the larger the per cent. of college graduates who occupy it.

5. It is observed also that a college education virtually adds ten years to a man's life.

6. College education not only increases the chances of material success, but it also refines, elevates, and ennobles character.

7. Unless some other cause can be shown for the remarkable success of college graduates, the strong presumption is that it is due to college training.

8. A course of study and training that has wrought such results should be carefully and wisely conserved.

# DEPARTMENT OF NORMAL SCHOOLS.

## PROCEEDINGS.

THE Department of Normal Schools met in the room of the Court of Appeals, Wednesday, July 15, at three o'clock P.M. The meeting was called to order by the President, GEORGE P. BROWN, of Indiana. The Secretary being absent, F. F. Irish, of Lima, Ohio, was chosen Secretary *pro tem.*

The annual address of President Brown was given, after which the President appointed E. C. Hewett, of Illinois; A. R. Taylor, of Kansas, and Miss M. S. Cooper, of New York, as committee on nomination of officers.

C. C. Rounds, of New Hampshire, moved that a committee of five be appointed to prepare a plan for a Reading Circle, which plan should be reported at the Friday meeting of this Department. President Brown was chosen chairman of said committee, who appointed C. C. Rounds, of New Hampshire, J. H. Hoose, of N. Y., Robert Allyn, of Illinois, and A. R. Taylor, of Kansas.

A paper entitled "The Functions of Normal Schools in our Educational System," was read by Edward E. Shieb, Ph.D., Natchitoches, La.

The committee on nominations reported the following: For President, Albert G. Boyden, Bridgewater, Mass.; Vice-President, George L. Osborne, Warrensburg, Mo.; Secretary, E. H. Cook, Potsdam, N. Y., who were elected.

A. R. Taylor moved that a committee of five be appointed to prepare a report on the curricula and methods of teaching in the different Normal Schools.

Dr. Hoose moved as a substitute for Principal Taylor's motion that this committee consist of one person, and that person to be Principal Taylor. After discussion by Professors Hoose, Taylor, Brooks, Wilson, and Cook, the substitute was adopted. After which the Department adjourned to meet Friday, at three P.M.

## SECOND SESSION.

FRIDAY, *July* 17.

The Department was called to order at three o'clock by President Brown, E. H. Cook being elected Secretary *pro tem.*, in the absence of F. F. Irish.

The minutes were approved.

The report of the Committee on Reading Circle was as follows:

*Resolved*, That we recognize in the movement known as the Teachers' Reading Circle an agency of great value in promoting the advancement of the general and professional culture of teachers. That this Department appoint a committee to collect information in regard to the character and effectiveness of the Reading Circles in the different States, and to report at its next meeting a plan of union of effort between them and the Normal Schools, that shall best combine the energies of both for the improvement of the schools of the country.

That the purpose for which the Reading Circle is organized is in harmony with that of the Normal Schools, and that these schools should exert their influence to promote the largest usefulness of this new agency.

These resolutions were adopted.

A paper by J. H. Hoose, Ph.D., N. Y., on the "Educational Value of the Common School Studies," followed.

[ABSTRACT.]

## *ON THE EDUCATIONAL VALUE OF EACH OF THE COMMON-SCHOOL STUDIES.*

BY JAMES H. HOOSE, PH.D., CORTLAND, N. Y.

### PREFATORY REMARKS.

THIS investigation is a professional study. The subject was assigned to me by President Brown so late in the year that I could not begin to write until four or six weeks ago; and the duties of school absorbed my time mostly until about two weeks since. But I have done the best that I could, under the circumstances. The theme is profoundly interesting; it has been treated from the stand-point of my own professional investigations upon mental activity rather than from the historical stand-point. My critical studies of mental action have extended over a series of years, and have been based upon the mental phenomena of the school-room. I have no speculative theories to propound; my investigations have completely upset many theories touching education that I held once. So that I am now much more certain of what I do not know concerning education than I am of what I do know of it; I am fully persuaded, however, that our educational literature discourses very loosely and erratically about education. I fear that too many of us are more zealous to protect our belief and defend our prejudices than we are to learn truth in educational matters. This investigation is merely introductory to the subject of the paper; the theme is too extensive and profound to be handled in one brief hour.

INTRODUCTORY INVESTIGATION—THE THEME OUTLINED.—The value of education can be investigated from two stand-points: *First,* It gives to him who possesses it a knowledge and a skill to perform his part in that community of interests which constitute the family, society, church, and the State; this is the utilitarian stand-point. *Second,* It confirms in its possessor a peculiar subjective state. This paper will limit its investigations (by command of the President) to the second product of education—the educational value of the subjective states which the common school studies confirm.

CONCEPTIONS OF EDUCATION ANALYZED.—The inquiry must proceed upon that conception of education which will allow the investigator to establish some basis for estimating the educational value of a branch of study.

The conception must exclude those propositions that are not universally true; it must contain explicit limitations. The necessity for this critical scrutiny will appear when some of the popular conceptions of education are examined, *e. g.*: (1) "Education is developing the whole man." What constitutes the "whole man?" To what degree of power must each and every faculty be developed in order to constitute the education of the whole man? Victor Hugo never rode on horseback with the agility, grace, or *éclat* of the circus clown. Was Victor Hugo educated? George Washington could never amputate an arm, or extract a tooth. Was he educated? Göethe could never break with a rifle eighteen out of twenty glass balls, while he was on horseback riding at full speed, the balls having been thrown up into the air in advance of him by another horseman at full speed—a feat that is done by the western scout, Mr. W. F. Cody. Was Göethe educated? Michael Angelo never tamed wild and vicious horses, as Rarey did. Was the great architect of St. Peter's educated? Was the whole man developed in these cases? Another conception of education is this: (2) "Education is developing the man so that he can live harmoniously with his social environment." Martin Luther raised war with his environment. Was he educated? Wendell Phillips lived during his most vigorous years on the watch towers, sword in hand, fighting for the freedom of the slaves. Was he educated? Did Martin Luther and Wendell Phillips live in harmony with their surroundings? The native of the equatorial clime eats, sleeps, and is happy in his environment. Is he educated?

A third conception of education is this: (3) "Education is a liberating of the spiritual nature of man—a subordinating of the physical, the baser, to the higher, the spiritual nature of man." The stoics lived according to this theory of life. Were they educated? Were they the only educated people of the times in which they lived? The ascetics of India live to subordinate the lower to the higher nature. Are they educated? A fourth conception of education is this: (4) "Education is developing the powers of man so that he may live in harmony with himself." What is meant by the expression, "in harmony with himself." Did Howard, the philanthropist, live in harmony with himself as he explored the dark dungeons where the prisoners suffered a living death? Was his labor a satisfaction to the longings of his nature, so that the harmony came in his activity? Nero fiddled at the burning of Rome because the act of fiddling satisfied the longings of his nature. Was Howard educated? Was Nero educated? Were both educated equally well? A fifth conception of education is this: (5) "Education is developing naturally to the highest degree what there is in man, so that he shall be able to adapt himself successfully to all the vicissitudes and emergencies of life." What is the criterion that shall measure "what there is in man?" and that shall define "the highest degree?" Is the criterion statesmanship? La Place could compute the

heavens, but he failed ignominiously to manage the treasury of France. Was he equal to the emergencies of life? Was he educated? Mr. Gladstone guided the Government of Great Britain safely through many very critical issues, but finally his administration was completely overthrown by a bottle of beer. Is Mr. Gladstone educated? Rousseau's Emile and Sophia were endowed and brought up with all the natural aptitudes and favorable circumstances that a fertile fancy or a brilliant imagination could create. The hero and the heroine were married and settled in Paris. A few months passed. Emile, the ideal of the natural training, fell into the net set by the fallen women of the city. Sophia sued for a divorce, and it was granted to her on the score of infidelity on the part of her husband. Was Emile educated? And, back of that, was Rousseau educated, who created no other type of a natural man than one who could not withstand the natural emergencies of life? A sixth conception of education is this: (6) "Education is the formation of character." What is the standard by which to measure character, its nature, the elements that compose it, the temper of the product? Washington asked General Wayne if he would lead the charge to storm Stony Point. General Wayne answered, "I'll storm hell, if you will plan it." Was Mad Anthony Wayne of sufficient character to be called educated? Blue Beard married many ladies of high degree, having only one wife at a time—a domestic economy that was not enjoyed by Brigham Young. (By the way, was Young educated?) Blue Beard must have possessed the artistic and fastidious appearance of a Beau Brummel, the manners of a Chesterfield, the condescending graciousness of a Sir Walter Raleigh, and the spirit and daring of a Mephistopheles, to have wooed, won, married, and killed, so many lovely women. Did Blue Beard have sufficient character to entitle him to be ranked as an educated man? What is character? Commodore Vanderbilt, who enjoyed no privileges of schools, created a great railroad. Did his character entitle him to be called educated? There is another type of man: his castle is perfumed with the incense of poetry indited by the ancient muses; sweet strains of music ravish his ear, painting and sculpture entrance his eye. In the æsthetical raptures of his soul he floats on the peaceful tide of social life as the nautilus on the smooth ocean. But turn on the lower lights; let the weather change into storms of discord and adversity, trial, and duty; this man of culture follows the nautilus—he gathers in his sails and sinks rapidly to the bottom, where he lives the life of a hermit and enjoys his miserly existence. Has this man that character which ranks him among the educated? A seventh conception of education is this: (7) "Education is thinking, or it is teaching one to think." What is it to think? Who thinks? He, the centripetal force of whose thoughts is greater than the centrifugal force, whose thoughts hover continually about that which incited them, like moths about the candle that aroused them

into flight and then consumed them? Who thinks? He whose thoughts radiate from the inciting causes, as carrier pigeons to distant points, with illuminating intelligence, connecting the near and the remote, and showing that the Many constitute the One? What is it to think? What are the marks of the thoughtful man? Rapidity of thought? Intensity of thought? Scope of thought? Another conception of education is this: (8) "Education is developing the powers of man and furnishing his mind with knowledge." Developing what powers of man? All his powers? See questions and cases in (1) above. Furnishing his mind with what knowledge? See questions and cases in (1), (2), (3), (4), and (5) above.

Another conception of education is this: (9) "Education is culture. A cultured man implies a man who has been trained (1) to know himself in his constitution, his duties, his powers; (2) to know society in its history and institutions, its literature and art; and (3) to know nature in its developments and scientific relations." What is the standard by which to estimate the point raised under (1) above—the old Grecian athlete, or the physician? the ascetics or the Sumners, for duties? the Spartacus or the artisan, for powers? In (2) above, the Cincinnatus of Rome, or the Julius Cæsar of Rome? To know in what sense? Is Sir Henry Maine a man of culture—he does not know music as Mozart did? Was Handel a man of culture—he did not know the history of institutions as Sir Henry Maine does? Under (3) above, was Lord Chesterfield a man of culture—he was not a Tyndall in physics, or a Roscoe in chemistry? Who is cultured? Where in history is the man of culture?

Conception of Habit.—The foregoing conceptions of education do not permit limitations that are explicit enough to admit of estimating educational values by them; and unless educational values can be estimated by some common standard, it is impossible to discuss intelligently the subject that stands at the head of this paper. The following conception of education allows explicit limitations for estimates, and is adopted therefore for the purposes of this investigation: "Education is the evolution of faculty and the formation of habit."

Value means worth; worth signifies to guard, protect, keep in store. Value means not only quantity kept in store, but quantity under the idea of measurement; measurement is possible only under the notion of standards; standards of measurements must be similar in kind to the quantity to be measured. The educational value of any study is estimated in degrees of mental power and habit, when it is adjudged by the above definition of education; the standards of estimate are states of intellectual power and habit; these states can be compared with each other; hence the educational value of studies can be estimated.

The function of the self-acting will is to evolve faculty. Faculty is a native endowment of the soul; it is the generic power of the race, active

as the psychical power of the individual ; this power acts under fixed conditions ; it is inconceivable that power can act except under some form of action ; this form of action is conditioned (1) by the nature of faculty, and (2) by the nature of the subject-matter upon which faculty operates. *E. g.*, (1) The agriculturist gives a certain tillage and a certain fertilizer to a certain grain, in order to produce in that plant certain qualities of stalk, or of kernel ; the forces of the inorganic world are conditioned in their activity and products by the nature of the life of this plant and by the nature of the materials that were submitted to the action of this plant life—*i. e.*, potash and this plant produce good cherries ; potash and this plant produce potatoes ; but potash and wheat do not produce luxuriant products of wheat straw ; salt will aid grasses, but will injure maize ; *e. g.*, (2) The stockman gives to certain stock certain foods in order to produce certain products ; he gives this food to produce milk in large quantities ; this food to produce products rich in butter ; this, because it will increase the fat of the animal ; and this because it will produce development of muscle, or of bone ; the form of these several products is conditioned by the nature of the animal life and the nature of those things which are placed before this life to receive its action. In like manner, the nature of faculty and the nature of subject-matter condition the form and the nature of psychical products ; *i. e.*, geometry cultivates the imagination, but the mental products are not those created and needed by the imagination of the novelist.

The form of mental acts is conditioned, necessitated, predetermined, disciplined, by the subject-matter (knowledge) that constitutes the thought or purpose of him who repeats the act—*e. g.* : The nature of color necessitates using the eye ; the nature of sound conditions the nature of the sense or faculty that shall be used—the ear ; the nature of the subject-matter, cause and effect, conditions the faculty that shall be exercised —comparison and inference ; to fashion iron conditions the form of action given by the smith's arm—to strike with a sledge ; to repel a foe conditions the form of action given by the arm in defense—to strike with the fist ; resenting slightly and flippantly a banter, conditions the form of action given by the arm and hand in retaliation—to strike with the flat hand, or to slap ; to play the piano conditions the action of the fingers to strike keys on the key-board ; to play the violin conditions the form of the action of the fingers—to press the strings upon the frets ; to play the flute conditions the form of the action of the fingers—to play upon the holes or stops to give this or that tone ; to construct geometry conditions the form of the act—to create figures ; to know to-day that Mr. A. was seen yesterday conditions the act—to remember ; to compute numbers conditions the form of the act—to remember ; to walk conditions the form of the act—to use in a certain manner the feet ; to catch balls con-

ditions the form of the act—to use the hands in a certain form ; to construct air-castles conditions the form of the act—to create by the imagination. These examples reveal the law that the nature and form of subject-matter condition the character and form of activity ; *i. e.*, every act is power in motion under a conditioned form ; *i. e.*, every mental act involves two conceptions—(1), power, and (2), form. These two notions, power and form, constitute the complex notion known as habit, as the term is applied to psychical actions. From this stand-point, the definition, "Education is the evolution of faculty and the formation of habit," would stand thus : Education is the formation of habit. Habit signifies psychical power in a conditioned form of activity ; and subject-matter (knowledge) manipulated by the mind conditions the form of the habitual act. Habit is confirmed power evolved under fixed form by repeating one act ; *i. e.*, by repeating one form. Habits are psychical states in which conditioned activities are performed with a minimum of conscious effort of the will ; and herein are habitual acts to be rigidly distinguished from those voluntary, non-habitual acts that are performed with a pronounced, conscious effort of the will. Habit is acquired more rapidly under simple forms of activity than under complex forms, although under all forms it becomes a unit-habit for that given case—*e. g.*, the habit of handling the knitting-needles ; the acts of swinging the arms, balancing the body, and moving the feet and lower limbs in the habit of walking.

Inasmuch as habit is conditioned upon subject-matter, it must follow that the habit will decay under a continued absence of the subject-matter (knowledge) that gave rise to it—*e. g.*, the withdrawal of testing-colors causes a decay of the habit of discriminating colors. Subject-matter is to habit what locks of hair were to Samson's strength—a condition precedent, a final cause.

A habit that is conditioned upon one form of subject-matter is conserved in part by another habit or act that is conditioned upon another form of subject-matter—provided the two subjects are closely allied in form and in nature, *e. g.*, the arm of the smith has a habit of striking with a sledge ; the arm conserves a portion of this habit when it lifts a weight, or when it strikes with the fist. The habit of treating the fictions of the imagination with all the considerations due to truth is conserved in part by a habit of telling lies.

A habit that is conditioned upon one form of subject-matter is not conserved by another habit or act that is conditioned upon a form of subject-matter that is not allied or akin to the former, *e. g.*, the habit of the smith's arm and hand to strike with the sledge is not conserved by the habit of the arm, hand, and fingers to play upon the keyboard of a piano ; indeed there is a conflict of habit in this case, brought about by the nature of the subject-matter that conditions each habit. A habit of

remembering dates is not conserved by a habit of remembering names. A habit of discovering homologues in subjects is no aid to a habit of detecting black squirrels in the tree-tops.

The nature of habit is not conditioned by general intelligence. Intelligence is measured by the number of the mental products that the mind possesses, or has possessed. The value of intelligence is measured by the nature and the character of those mental products—whether they are precepts or intuitions; or whether they are ideas, notions, general or universal concepts.

The educational value of a branch of study is estimated in part by the career which overtakes the habit confirmed by the branch, subsequently to the formation of the habit, *i. e.*, is the habit formed by said branch one that will be conserved and appropriated by habits to be confirmed by subsequent studies, or by the course of subsequent life, *e. g.*, the school-habit of calculating numbers with lightning rapidity drops into decay when the pupil enters into higher courses of study, and into all but a very few of the occupations of active life.

Habits that are formed under a maximum expenditure of volitional energy are liable to decay more rapidly by removal of the conditioning subject-matter than those that are formed less rapidly and with less tension of the will, *e. g.*, the habit of remembering numbers, as in adding under intense tension of application, decays rapidly at the removal of the extraordinary stimulus under which the habit was formed.

Habits may be some time in solidifying into confirmation; they may be apparently latent in youth, coming to maturity in due time, showing power, *e. g.*, the habits of parents are formed imperceptibly by the child and youth, exhibiting themselves in their power in adult life, as to assume the habitual walk of the father or the habitual secrecy of the mother. These habits may be considered to be hereditary.

Habit is neither good nor bad; it simply is; it is purely power to act, conditioned to act in this form. Habit has, therefore, no moral qualities, for power acting under a conditioning form of subject-matter does not change the nature of the subject-matter that conditions the form of the act; nor does habit modify the nature of the result that follows its activity. What are called bad habits, or good habits, means only that the results of the activity of the habits are good or bad when judged by the standards which society has established to give an estimated value to said results.

While habit has no moral qualities, yet the subject-matter that conditions habit—and hence results of habit—is or is not endowed by that quality which constitutes what is called the moral nature of it. That is to say some subjects lie so near to the activities of human life that they arouse immediately the emotions; and hence sympathies, prejudices and bias

appear in the acts or habits; these results, radiating life, are called moral forces. Habit produces results; if the results shimmer with emotion, they are said to be moral. Some subjects condition habits that produce no results that have moral tone, *e. g.*, the subject of practical benevolence will incite the emotions and may thus be called one that is endowed with moral purposes; the subject of addition is intellectual, and has no emanations of moral influence.

The sum total of habits measures the present capabilities of him who possesses them.

Habit is stronger than mere knowledge, *e. g.*, the habit of forgetting to mail a letter overrides often the knowledge that it should be mailed promptly; the habit of drinking subordinates the knowledge that the drink is harmful.

Habits characterize every period of life. As life advances the number of habits diminishes as the subjects of thought and activities of life diminish, and those habits that survive become more pronounced and fixed.

Habit modifies, unconsciously, our opinions, *e. g.*, an habitual believer in Allopathy is more or less prejudiced thereby against Homeopathy. One who holds habitually to a certain conception of education experiences serious difficulty when he attempts to see truth as it lies in another conception of education.

Habit exists in various degrees of firmness. Confirmed habit signifies mastery over the subject-matter that conditions it.

Habits arising from subdivision of labor in the business world have commercial value. The tendency is to decrease the number of habits, and to make these few more firm and accurate. The self-acting will conserves, undoubtedly for its general purposes, a modicum of the power of each of its habits, even though the particular habit has fallen into decay, *e. g.*, in like manner as a trunk of a tree becomes stronger from the strength of the several branches of the tree. This state may be called a habit of habits.

Discussion of the Subject.—The common-school branches include, perhaps, the following: reading, penmanship, arithmetic, writing, drawing, music, geography, English grammar, physiology, United States history.

Having outlined the basis upon which must be erected the standards by which to estimate the educational value of branches of study, the serious question arises: What is the nature of the subject-matter that constitutes each branch? What is the power of its function to evolve habit? If the branch is not homogeneous in matter, it will form a medley of habit; if the matter of the branch be not a unit in conception, the habit that it forms will lack the power of unity. Hence the first step of the investiga-

tion is to outline the conception of the subject-matter of each study with the most rigid and critical discrimination in order to connote the marks of the habit that said branch confirms. A habit of classifying subjects correctly is one of the prime conditions of scholarship. The necessity for these rigid outlines of branches will appear when it is remembered that teachers advocate often the introduction of so much extraneous matter into classes, "to add variety and interest to the work." An analysis of an event in history, or of a case in law, or of a case in medicine, will reveal the error of such a course.

Each branch of study must be outlined; the habit of mind that it confirms must be revealed; then the educational value of the study can be estimated. But this is a future work; time has not permitted me to enter critically into those investigations.

## DISCUSSION.

Dr. J. H. Payne, of Michigan, said: "The study of educational values was begun by Plato and Aristotle, and continued in modern times by Bacon, Whewell, Latham, Bain, and Spencer. Value is the exponent of effect. A study may have as many values as it has effects. The fundamental distinction in educational values is into practical and disciplinary. Practical values are either *primary* or *secondary*, and disciplinary values are either *specific* or *tonic* (*culture*). The three culture subjects of the common school are geography, literature, and history."

Dr. Edward Brooks, of Pennsylvania, said: "The practical value of this subject is so great that I feel like adding a few words to what has already been so well said. I agree with the learned author that this problem must be settled on the basis of a correct conception of the problem of education. My own experience has led me to the following definition of education: Education treats of the developing of the powers of man and the furnishing of the mind with knowledge. This makes the work a dual one, which two parts may be embraced under the operations of *culture* and *instruction*. Now, in order to determine the educational value of studies we must first understand what they do in giving culture, and second, what they do in furnishing the mind with knowledge.

First, in respect to culture we must understand what faculties are active in the study of a branch of knowledge, and then we are prepared to estimate its educational value. Thus, if we know what faculties the physical sciences bring into activity, we shall know somewhat of their value in education. So of mathematics and of all other studies.

Secondly, we must determine what things are most valuable as a possession of the mind, and then see what branches of study furnish these things to the mind.

In this way, from a true conception of the nature of education and of the relation of the different branches of study to the mind, we may approximate a correct solution of this problem and reach a conclusion in respect to the educational value of studies.

Prof. M. A. Bailey, of New Hampshire, said: "The educational value of a study depends as much upon the method of its presentation as upon the nature of the work. To illustrate by arithmetic. The one teacher by giving only a stated number of pages per day brings the scholar to the end of the book. He later derives some practical but very little educational value. Another teacher shows that addition is an abbreviation of counting, that multiplication is an abbreviation of addition, and, in

fine, that every process in arithmetic and the higher mathematics is but an abbreviation. Hence the greatest ingenuity is required to discover new processes of abbreviation. All of the faculties are brought into the work, and the greatest educational value is thereby derived."

Eugene Bouton, of New York, said : "There are three points in connection with this paper and this discussion to which I desire to call your attention. One of these I deem essential, and two of them may perhaps be regarded as side issues. As to the essential point, I think it contributes very much to the confusion of our discussion that we fail to distinguish between what education is and the objects of education. For my own part, I am not at present desirous of finding fault with Dr. Hoose's definition of education, but I feel that the distinction I have suggested ought to be carefully regarded in the discussion of educational values. One of the side issues that occurred to me was that Martin Luther and Wendell Phillips were as much in harmony with their environments as is the savage. But the environments of the savage are his immediate surroundings at a given time, while the environments of Luther and Phillips were all creation and all time, and their harmony was correspondingly extended and general.

The other side issue refers to the discussion of the study of history.

Two questions occurred to me in listening to the paper. First, after the items mentioned have been eliminated from the study of history, what would be left, and would the remainder be worth studying?"

Prof. Lumry, of Illinois, hoped that the subject under consideration, being one of vast importance, might be continued and that valuable conclusions might be reached. He believed that such conclusions are attainable, and when reached would revolutionize our ideas. Manifestly some subjects develop the mind on a single phasis and give it narrow and limited powers, while others develop it in more directions, and at the same time give it definite and valuable information. The object of education is not simply the formation of habits, but the development of character.

Prof. Miller, of Pennsylvania, said: "No more important subject has been discussed. Truth is large and grows larger every day. The question is, how much and what truth is to be selected for the instruction of the child, and what is the relative value of these truths? The educational value of a man depends upon the amount of his knowledge and ability to use that knowledge wisely. This test will apply to a Newton, Napoleon, or a savage. Educational values of subjects depend upon the same criterion. Studies are not equal with regard to disciplinary value. The value is determined according to the relative cultivation of attention, memory, reason, judgment, will—in this order—history is more valuable than arithmetic."

Dr. Hoose said : "I am gratified that the subject has been discussed so fully. I am seeking truth only. If I had had time to complete the investigation, these several points mentioned would have been examined. Professor Payne's views of the disciplinary value of studies would have been investigated. Most of the speakers have discussed educational values from the stand-point of the utilities—this has been studiously avoided in the paper, as was stated at first. The disciplinary value of a branch, and the notion of knowledge, are explicitly involved in the notion of habit. Some of the speakers have not distinguished between habit and a non-habitual act in the examples given by them. My studies into this subject have been both deductive and inductive. If the definition of education adopted by this paper allows animals to be educated, the matter of human education is not changed by the admission that character is habits of choice."

Remarks were also made by E. H. Cook, of New York, Superintendent ; Barringer, of New Jersey ; and Mr. Richards, of District of Columbia.

Mr. Bouton said : "In regard to Dr. Hoose's reply to my discussion, while I do not

wish the discussion to degenerate into dispute, I must maintain the position that the educational value of studies cannot be determined without taking into consideration the objects for which they are pursued and the results which follow their mastery."

At the conclusion of this discussion motion was made that a committee be appointed to report next year on the Educational Value of the Common School Studies. Carried.

The committee chosen were J. H. Hoose, New York; W. H. Payne, Michigan; and Edward Brooks, of Pennsylvania. Adjourned.

# THE FUNCTION OF THE NORMAL SCHOOL IN OUR EDUCATIONAL SYSTEM.

BY EDWARD E. SHEIB, A.M., PH.D., PRESIDENT OF THE STATE NORMAL SCHOOL OF LOUISIANA.

THE SUBLIMEST WORK OF HUMANITY IS THE MAN OF CULTURE. True culture is the highest possible development of man's talents and powers in accordance with nature's laws for the sake of personal well-being and the happiness of others. Family, school, state, church, public life, pursue similar ends. The labors of these institutions—the great sources of culture and refinement—should of necessity be evolved in perfect harmony.

The modern state is forced to admit, and it recognizes more clearly every day, the obligation which demands as imperatively, the education of its children, as it requires the protection of the lives and rights of its citizens. Upon the sacred performance of the pledge to which it is committed—the education of those who will be called upon to assume the duties of citizenship—must depend the perpetuation and the growth of republican institutions. Hence our national development and the tender care of an educational system which is prepared to mold intelligent, self-reliant, and conscientious men and women, are made inseparable. The public school becomes the ground-work of the most perfect type of government ever attempted by a people. Government itself cannot be permanently attached to rigid characters. Old forms must disappear with the occasions which called them into life. In the evolution of new forms is manifested a nation's vitality, its energy, and its capability of improvement. Independence of thought, fidelity in matters of conviction, the cheerful sacrifice of some part of the individual's rights for the benefit of society, and the will to perform conscientiously what has been intelligently recognized as right, constitute the great virtues of the citizen of a free republic; they constitute at the same time the great virtues of the true man.

Thus education, which has for its object the perfection of the individual, and recognizes no worthier end than the formation of intelligent men and women with wills capable of obeying the dictates of conscience, becomes the most valuable factor of a free government. The true citizen of the republic is at the same time the intelligent and moral man for whose perfection education labors.

These truths are generally admitted. They have led, little by little, to the erection of an institution which in many respects is peculiarly national, and which has become the pivotal point about which our system of public instruction revolves. They indicate the position which the "Normal Schools" occupy in the plan of public instruction.

EVERY DEPARTMENT OF KNOWLEDGE HAS BEEN, OR IT IS AT PRESENT, MADE THE SUBJECT OF A SEARCHING PROCESS OF ANALYSIS, preparatory to its logical reconstruction upon scientific principles, and in conformity with the nature of the subject of inquiry and the laws of reason. The natural sciences have outstripped all others in this work of classifying and of explaining all natural phenomena in accordance with a few general laws.

The principles determining the development of society, economy, and government, and the rules by which moral and mental truths are developed, have, in a scarcely less degree, attracted the attention of philosophical inquisition.

The present age seems determined and prepared to wage war against chaos and ignorance wherever they appear. Not content to record mere facts, it demands to know the causes which underlie appearances.

In the face of this spirit of advancement, which strives to subordinate everything to general principles and order, it would be useless to antagonize intelligent progress with antiquated forms, cherished prejudices, and unreasonable bias. In intellectual work as elsewhere, there can be no rest, no stand-still.

LIFE IS MOTION, EITHER IN THE DIRECTION OF IMPROVEMENT, OR BACKWARD TO DECAY.

So mental stand-still signifies mental stagnation, and stagnation means degeneration. It would be idle, in the midst of this general forward movement, to anticipate a vigorous growth where few attempts have been made to dispel a prevailing confusion of ideas. Misconception in such instances helps to hide the real sources of evil. And it would indeed seem strange if, while we admit that even commercial and mercantile pursuits are subject to general philosophical truths, efforts should not have been made to discover whether there do not exist philosophical principles of education, and whether there are not immutable truths upon which a rational system of education can be founded. Theory, with our eminently practical people, has fallen into disrepute to such a degree, that even to advance the idea of a "Theory of Education" seems a sufficiently valid reason for casting suspicion upon the theorist, and for pronouncing him a speculative dreamer who deals in impracticable notions. Experience, so called, enjoys so high a place of honor in the estimation of men, that

nothing seems to deserve to be regarded as trustworthy unless received directly from her hands.

Unfortunately, those who claim to be guided by experience usually deceive themselves. They mistake for experience what in reality is only appearance. An ignorant man can place little reliance upon his impressions; at best he can conscientiously record whatever he may see and hear. These appearances are made to serve him in the place of reason and instead of effects resulting from remote and complicated causes.

THERE IS NO OTHER DEPARTMENT OF HUMAN KNOWLEDGE IN WHICH "EXPERIMENTING" HAS BEEN PERMITTED TO PROCEED WITH SUCH MANIFEST RECKLESSNESS, WITH SUCH A DISREGARD FOR NATURAL LAWS, AND SUCH AN IGNORANCE OF PURPOSE AS IN THE FIELD OF EDUCATION.

And as a consequence, for a long time methods have prevailed which have come down to us in a direct line from the old church schools of the thirteenth and fourteenth centuries. While elsewhere the world was putting forth new forms, the school which ought to prepare for life, lay incrusted in the bias, the dust-covered garments, and the moth-eaten methods of ages which had long since passed away.

A sickly plant or animal quickly falls a prey to vermin, and the school which ignored a world which was advancing with giant strides, fell into the hands of ignorants and of dull pedagogues—the terror of the generations whom they undertook to mold with birch and strap. The profession was degraded, and it continued in this unenviable plight almost up to the time of the educational Renaissance in this country.

We are hardly a people to be deceived for any length of time by a display of magnificent buildings or by the rhetoric of flattering school reports. The questions propounded to us to-day read: Those who come from the schools, are they more intelligent, better prepared to resist the temptations which will rush upon them when they enter the life of the world, more capable of performing well the duties of life and of citizenship—in short, are they morally and intellectually better men and women? If there is not a marked improvement in this direction, no one who has at heart the advancement and the happiness of our people, will be willing to find in the elegance and practical arrangement of our school-houses a proof of progress in the department of education.

## Psychology.

IF THERE IS TO BE A PERMANENT IMPROVEMENT IN THE EDUCATIONAL SYSTEM, IT MUST BE EFFECTED IN A MANNER SIMILAR TO THAT WHICH HAS INAUGURATED PROGRESS IN EVERY OTHER FIELD OF KNOWLEDGE AND ART.

Here, too, the principles and the laws upon which this particular

department of knowledge is founded must be made the subject of special investigation. Experimenting without a philosophy cannot achieve satisfactory results. Only, if there is *no* philosophy of education, and if it is impossible to found a rational pedagogy on philosophical truths, then the results collected by an awkward system of experimenting, however unsatisfactory, are nevertheless the most favorable returns we can look forward to. But we are far from admitting that education has no more trustworthy foundation than "chance," or that the labors of students and investigators in the departments of psychology, biology, and ethics have remained barren of results.

## Ethics.

Every step that is taken to advance culture and refinement, at the same time assists in impressing on the mind more clearly the object of education, which was almost lost sight of during the period of demoralization that so long prevailed in the schools. But in order to recognize a higher object of education, consisting of delegating true worth to the individual, in perfecting the mind and in molding the character, a philosophical study of the principles of ethics and sociology had of necessity to precede.

Not that without such preparatory study it may be possible to see very clearly what constitutes a really noble character. Still, in all philosophical study, every vestige of doubt must be removed. The history of philosophy and of religion shows plainly enough how much confusion, error, and immorality have in all ages rendered the prevailing notions of ethics vague and untrustworthy.

However complicated the mental phenomena, and however difficult it may at times become to unravel the innumerable threads that form the network of some mental conditions, still mental growth is observed to advance in strict accordance with laws as immutable as those which regulate the changes in the outer world.

Hence the absurdity of all attempts to mold the character according to the highest ideas of morality, without a careful investigation of the principles of ethics; and therefore, too, the hopelessness of all labors to influence the development of the mind while disregarding the laws of psychology. Whenever we ignore nature's laws or willfully oppose them, confusion overwhelms us, and our destruction is planned.

## Theory of Education.

It is to this conclusion, then, that we are forced: the science and the art of teaching are founded on principles of ethics and of psychology. An improvement of the system and of the methods of teaching is only to be

sought for in the careful study of the laws of mental and moral growth, and the sincerity with which all educational attempts and rules are rejected, for which a justification may not be found in the laws of development.

Bearing in mind these general truths, and demanding for the educated man the valuable qualities which go to make up a self-reliant and independent character, the place which the normal school is destined to fill in our school system is defined without difficulty.

EDUCATED AND EFFICIENT TEACHERS ARE THE INDISPENSABLE FACTORS OF THE SCHOOLS.

Institutions for the preparation and training of such teachers become the real fountains whence the schools must draw their energy, their intelligence, and their vitality.

The normal school is called upon to solve one of the most difficult problems which life, the existence of society, and the preservation of the state, suggest.

And therefore it at once, and of necessity, assumes a most important place in our school system. The moment it is remembered that the schools, including the primary, the grammar, and the high school, are the institutions whose mission it is to care for the training and the education of the children of the nation, and whose influence extends into the future and far beyond the limits of every other power, it will be admitted that the normal school occupies a position more prominent, and that the responsibilities which it assumes are greater than the place and the duty imposed on any other institution, whether educational or professional.

The normal school undertakes to prepare, with the necessary skill and accomplishments, those who will direct the education of the children of the nation, and to care for a harmonious development of youth, physically, intellectually, æsthetically, and morally.

This harmonious development, the cultivation of the various talents and forces, the one in its proper relationship to all others, becomes the condition of refined intelligence. Bias, no matter whence it originates, is the natural source of an endless stream of evils, the origin of ignorance, of sensuality, of unmanly egotism.

THE EFFECTS OF AN INHARMONIOUS DEVELOPMENT ARE REFLECTED IN THOSE MEN WHO, WHILE THEIR ATTENTION IS ENGAGED BY THE SUBLIME IDEAS OF SCIENCE AND ARTS, HAVE NO SYMPATHY FOR THEIR FELLOW-MEN, NO PATRIOTISM FOR THEIR COUNTRY, NO HEART FOR THEIR FAMILIES.

Others, who bury themselves so deeply in the labors of their common occupation, or forget themselves so entirely in the pursuit of pleasure that they lose all conception of the nobler delights of intellectual activity, manifest in their warped existence the evils of an inharmonious development. Again, others betray this bias in their conceit and pretense, in

their real or pretended belief that they are the centers of a social life which circulates about them, or they manifest it in a pious contemplation and an impregnable conviction that they alone pursue the road to truth and virtue, and therefore have a right to indulge in self-admiration, to grow irritable and harbor a spirit of resentment and persecution toward those who delight in the beauties of nature, the pleasures of society, and worldly recreation. And, finally, the effects of an inharmonious development are displayed in the lives of the mental cripples and monstrosities who have no faith in the good and the truth of the human heart, who ridicule every effort which is made and every battle which is fought for the welfare and improvement of the human race, and thereby rob themselves of that peace of mind and joy of heart which spring from the consciousness of an exercise of unselfish and cordial benevolence.

AN ENDLESS LIST OF EVILS ORIGINATES IN A PREJUDICE WHICH CULTIVATES CERTAIN TALENTS AND FORCES AT THE COST OF OTHERS, AND DESTROYS THE EQUILIBRIUM OF MIND AND HEART, RENDERING IMPOSSIBLE A NORMAL AND BEAUTIFUL CONDUCT OF LIFE.

Agreement between body and mind, and between understanding and heart, is the key to a noble and wise life, and is the only means for bringing about a perfect arrangement of all the spheres of human activity.

This is culture—a struggle for perfection and refinement in all that pertains to humanity. It leads in every direction and to higher mental activity.

In the training of the understanding by means of intelligent thought, comparison, and classification, this culture leads to the lofty spheres of science, and rewards with bountiful stores of useful knowledge.

Guided by the idea of truth, it prepares the way for clearness and independence of thought.

By the cultivation of the feelings, it ingrafts a proper appreciation of whatever is noble and humane.

Under the light of the idea of the beautiful, it awakens that joy of the heart which springs from refined and natural sociability, kindles a love for whatever is beautiful and graceful, whether displayed in the arrangement of colors, the harmony of sound, the artless art in nature, or witnessed in every act of justice, mercy, and benevolence, or in self-sacrificing love—stamping the moral side of life with the impress of beauty and nobility.

This culture leads to the development of the will, and, guided by the purest feelings of the heart, nourishes that true *humanity* to which nothing which is beautiful, noble and humane, can continue inimical.

The true nobility of man is portrayed in his *humanity*, and one of the first labors of those who undertake to educate others, is to combat selfishness, to nourish mutual love, to display a readiness to aid the weak and the ignorant, and to strive to be a guide and a support to the helpless and the despairing.

Light for the mind, strength for the will, love for the heart, and harmony between all human forces—these are the words of magic by which mankind holds itself suspended between heaven and earth in true sympathy with the worthiest aims of life.

THE VERY LOOSENESS OF OUR JUDGMENTS THREATENS TO UNDERMINE OUR SOCIAL AND NATIONAL LIFE.

All the more necessary must it appear that we should feel ourselves compelled to make careful valuations of our sentiments and actions, and that we should studiously investigate the first causes which underlie all such valuations.

The admiration which we evince spontaneously for a bold and daring deed, which in itself may be evil or even barbarous, seems to indicate that in the midst of a world throbbing with energy and vitality, even virtue cannot remain passive and still lay claim to that exalted name. Morality must be a living morality in a world that is all life and activity.

The greater therefore the necessity to consider and to comprehend clearly the higher aims of life. Otherwise, in the tumult of the multitude's vociferous applause in honor of rulers, statesmen, heroes, and adventurers, whose deeds may all have been born of selfish and unworthy motives, our own judgments may become clouded.

Again the cry is raised for real men and women who estimate humanity more highly than the history of dynasties; who value the man more than his position in life or the privileges which accidents of birth and of fortune permit him to enjoy; who regard truth with greater reverence than even those traditions which age and the dust and cobwebs of centuries have armed with a dreaded authority. The demand is for men who believe self-respect and truth to principle to be more precious than applause, and for men who perceive that *he* is the nobler man who in all attempts at improvement begins with himself, and who is prepared to scatter with a liberal hand, into the widest circles, the truths that have been revealed to his mind.

VIEWED FROM EVERY POINT, A CAREFUL EDUCATION BECOMES THE CORNER-STONE OF INDIVIDUAL AND NATIONAL DEVELOPMENT AND INDEPENDENCE.

The mission of the normal school is clearly to prepare teachers capable of performing this educational work in our national schools. It aims to prepare teachers to educate true men and women to humane dignity and to the appreciation of talents and forces harmoniously developed.

Such an education cares for the proper exercise of the understanding, the culture of good taste, and the direction and the strengthening of the will.

It is an American and a humane idea to bespeak in every instance the education of the whole people. According to the principles of education,

it is the individual who becomes the object of our labors. Consequently, only by devoting the requisite attention to all the individuals that go to make up a people can both demands be complied with. The little or much originality belonging to each one is not then sacrificed, and every individual becomes a center and a power capable of contributing something to the wealth and the well-being of the race.

These demands fully justified by the position, tastes, the influence, and the progress of the nation, and in strict accord with the advanced notions of morality, society, and government, cannot be ignored without entailing national ruin, social corruption, and individual destruction.

The normal school, in the United States, presents a different aspect from the institutions for training teachers in other countries. It is closely interlinked with our system of public instruction, and influences directly the whole educational work in a manner different from all similar institutions in Europe. As a professional school it has developed, in most instances, independently of universities devoted to all other professions. Its influence as an institution for training those who in turn will be called upon to educate, and as an agent for the dissemination of knowledge, extends far beyond the limits within which the universities are productive of good. Universities, as such, have only indirectly and in a far less degree than the normal schools, operated for the immediate cultivation of the people. The great universities of Europe became the centers of learning. But a comparatively small number of men enjoyed the privilege of entering their halls. The great multitude outside of these charmed circles continued for centuries in the same deplorable ignorance. Between the people and the universities there was little in common. Ignorant of the wishes of a nation and indifferent to the claims and sufferings of a people, they frequently degenerated into strongholds of prejudices, dogmas, and received opinions, which they handed down from generation to generation. As a consequence, they frequently became the enemies of progress and the persecutors of reformers.

Notwithstanding the changes which time has effected, it may be asserted of the universities that their influence extends to only a small part of the people, and that only slowly and indirectly they become valuable contributors to the elevation of the masses.

But the graduates of the normal school pass directly from the study halls to the class rooms, come at once and daily in contact with the children of the people, in cities and in country districts, making it their profession and their life's labor to form the characters of these children, and to make them equal sharers in the knowledge they have gathered. No other institution is capable of accomplishing so much in an equally short time. It would be idle to expect that the universities in their present

form, and unwilling to admit even the existence of a science and an art of education, could supplant the normal schools.

But the peculiar position of the normal school, and that which characterizes it as an institution widely different from every other, is not made clear until we come to consider that the knowledge accumulated in various departments, collected in books and transmitted to students through the universities, high schools, the press, and through numerous other channels, must be rearranged in accordance with the laws of mental growth, and in conformity with the different stages of the child's development.

For the logical arrangement of the matter in scientific, philosophical, historical, and other books, and the same logical presentation of subjects in the auditoriums of universities and colleges may not present serious difficulties to a young man or a young lady accustomed to abstractions, and to logical thinking. But it is widely different in the case of a young child. Its mind is not capable of accepting at once general principles and theories, and of following intelligently the careful deductions from general truths to particular facts. On the contrary, the child's mental development proceeds, as it were, in a line parallel to that in which the human race has traveled in its progress from barbarism to civilization. The portals through which it receives impressions are the senses, and from the simple facts with which it becomes familiar it advances slowly to generalizations, associations, and comparisons, abstractions, and logical ideas. This is the same process of mental growth by which the human race has acquired knowledge during the long centuries of its gradual development.

THE CHILD IN THE COURSE OF ITS MENTAL GROWTH PRESENTS FEATURES WHICH CORRESPOND TO VARIOUS EPOCHS IN THE HISTORY OF THE HUMAN RACE.

Its mind in these different stages evinces a disposition to be occupied with, and a keen appreciation of the same thoughts and feelings that engage the human race during different periods of its historical growth. In the very grading of our schools we consciously or unconsciously admit this. If such expressions may be permitted, the "Fable Period" the "Fairy Story Period," the "Hero Worship," and the "Patriarchy Period," would at the same time indicate various stages in the development of the human race, and in the mental growth of the child of to-day. The researches of science, of psychology, biology, and sociology lead us to anticipate just such peculiar features in the development of the child as the observant and experienced teacher finds opportunity to witness.

Nothing, indeed, causes the teacher so much concern, and, in truth, nothing so much retards the progess of education as this neglect to arrange the knowledge which is to be imparted to the child in accordance with the laws of mental development, and the historical epochs which mark the progress of the human race. In other words, there is an imperative

demand for appropriate text-books in which the material is not collected systematically as in the logically constructed scientific works, but in which synthetically and in strict correspondence with the principle of psychology, the subjects are presented in an acceptable form.

This reconstruction of the text-books will constitute one of the most arduous tasks imposed on educators in the near future.

It constitutes one of the missions of the normal school. Nowhere else can this work be performed. Not in the common schools, for they can find neither time nor occasion for such labors. They must presuppose this work already completed. Not in the universities, for either they ignore this department of knowledge, or where such is not the case, no effort has been made to supply the means for close observation, and for the careful testing of theory and practice.

### Practice Work.

The normal school, however, while it devotes its labors to the study of psychology, ethics, and the theory of education, and undertakes to present to its students the best methods of teaching the various branches of knowledge, finds in its "practice schools" and "critiques" daily occasion for testing these methods by the principles of science, and at the same time it possesses in the "practice school" a most fruitful field for intelligent observation and reliable experience. It is, therefore, peculiarly well adapted for this task of rearrangement of all knowledge for the use of the schools. Inasmuch as it recognizes no higher purpose than to secure the conditions of rational education, it affords every security for the intelligent performance of its work, and its satisfactory completion. Instance the excellent contributions which have been made by some of these institutions, as recorded in many of our educational journals. The outgrowth of this must be the production of just such text-books as we stand so greatly in need of.

Moreover, a constant contact with the common schools, and through these with the thoughts and the aims of the people, assists in bringing about that friction of ideas which is most essential to mental growth. The excellence of whatever the normal schools may accomplish, is almost immediately reflected in an improvement in the work of the teachers. Every valuable suggestion, no matter whence it springs, is likely to receive immediate consideration. Under these circumstances—so to say with the life's blood of the nation throbbing in its veins—it is next to impossible for the normal school to lose sight of its high mission, and to degenerate into a school of routine and mannerism. It would to-day be impossible for the great truths preached by Montaigne, Basedow, Rousseau, and Pestalozzi, to remain unappreciated for so long a time, as was

the case in Europe when those men attempted to bring about a reform in the schools.

The mere fact of the existence of an institution dedicated to improvement in all matters of education and prepared to test every new idea which may influence the educational labor, as systematically and scientifically as a chemist examines a bit of matter in his laboratory, marks the greatest progress in the work of education that has been recorded in the history of schools. Whatever advantages were supposed to accrue from the adoption of a particular system of public instruction, or whatever benefits were believed to result from the selection of one method of teaching in preference to another, these claims, which under other circumstances and under the pressure of unreliable authorities might have been maintained, even to the detriment of the schools, are ignored by the normal school if detected to be mere sophisms, or found to conflict with the principles of development.

Again, the public schools have been charged, and certainly not without good reason, with what often looks like even a willful neglect of the sympathetic side of human nature. That love for the beautiful, in nature and in deed, and that force of character which alone confers upon us the dignity of manhood has been overlooked, while all efforts were united to develop the intellect. Or in their anxiety to avoid the religious question—a question which, very wisely has been excluded from the public schools—teachers have hesitated to assume the responsibility of the moral culture of the child, sharing with so many the narrow view that morality and sectarianism are inseparable, and forgetting that there is a morality, pure and simple, based upon fundamental principles which are equally binding to Buddhist, to Hebrew, to Christians, and to the followers of Islam.

The normal school recognizes the noble object of education. In strict conformity with this object it founds the educational work upon principles of psychology and ethics. It is, therefore, from its very composition, driven to the cultivation of the moral side of man, and in this respect it becomes the valuable factor which alone is capable of effecting a reform in the public school by bestowing upon the moral education that care and attention which was for so long a time wrongly withheld.

As in every other institution created by man, no matter what may have been its original object, so in this instance the mere establishment of schools, their arrangement according to some plan, the distribution of the labor and the employment of capable instructors, will not necessarily insure a vigorous and healthful development.

THE BEST SYSTEM OF EDUCATION WHICH WE CAN DEVISE MUST STILL PRESENT THE POSSIBILITY OF FURTHER DEVELOPMENT, AND MUST CONTINUALLY GIVE EVIDENCE OF ITS EXISTENCE AS A LIVING ORGANISM.

Otherwise in pursuance with the laws of growth, the torpor into which

it must inevitably sink is only the beginning of degeneration and disintegration.

The normal school, with its theoretical and practical departments, its constant revision of studies, its critical test of all work which it may be called on to perform, its amenability to no other authority than the laws of mental growth, morality, and national welfare, and its constant contact with the world, affords the most reliable security for its maintenance as the central point of our educational system. It becomes a guarantee that the public schools will be protected against false and mischievous notions; that mere routine and mannerism will be supplanted by intelligent work; that our schools will continue living and progressive institutions, exerting their refining influences in ever-widening spheres, by preparing the way for pure individual and national life.

The organization of "teachers' institutes" and "summer normals" are but single instances of an almost unlimited possibility of the normal school to accomplish the great object for which it was created—the organization, preservation, and development of a rational and national system of education.

In an age in which the preservation of energy has become the paramount consideration in all undertakings, institutions for education, no less than mercantile ventures, are influenced by this spirit of the times. In response to this demand of the age, the normal school, by securing intelligent methods and aids, by the careful training of practical teachers, by a just consideration of the requirements of the people, by the elimination of all that is vague, confusing, and positively superfluous, is capable of accomplishing in a few years what in the slow march of former centuries was not even vaguely comprehended. In its labors and its methods it breathes the spirit of progress and an advanced civilization, and in its adaptability to local requirements without a sacrifice of principle, it evinces its freedom from a rigidity characteristic of institutions which are passing away.

A national institution, the normal school of our country is the nearest approach to a realization of the ideas of Herbart, who, in the early part of this century was the first to demonstrate philosophically a system of educational science and art, based upon the principles of ethics and psychology. Resting upon fundamental truths, the normal school at once assumed its position among the institutions devoted to science and exact knowledge. It becomes an equal sharer in the respect to which all institutions devoted solely to the discovery and the dissemination of truth are entitled. It, therefore, more than any other institution, contributes to the elevation of the profession of teaching.

Perhaps what we demand, even what we hope for, may be sneered at as Utopian. Yet the fundamental truths upon which the realization of

these ideas are to be based, justify both hopes and demands. Even should this remain doubtful, the mere possession of an ideal is an indication of progress. "Man grows with his nobler purposes."

What will be the conclusion? Has not the normal school a duty to perform by training individuals to increase the culture of many? As long as life continues the individual is destined to serve others; and this self-sacrificing love is the means by which he cultivates himself and his fellow-men. What in this respect is true of individuals, may be asserted of nations. Hence culture is the grand total of worldly material, of acquired knowledge, of intelligence and insight, with which mankind, the nations, and the individuals, labor for worldly purposes.

The goal may be distant, and the number of men who can recognize it and struggle for it may be small. They may feel the solitude which surrounds them in the midst of a tumultuous multitude, the storm of events and passions, and the crowd of antiquated conceptions doomed to pass away, and associated with a generation which is unskilled and uncalled to perform the better work of the future—children of a former century who anxiously pick up a few grains left over from the seedtime, hoping to find nourishment in these when the golden harvest of a new era already covers the land.

Scattering the seed over the earth as yet covered with the winter's snow, preparing for and looking forward to the dawn of a new morning, the nobler men unite, a band of works, uncomprehended by the crowd, prepared to pronounce the magic word which gives expression to the pent-up and unspoken longings of the heart; with hearts that can enkindle new life in other hearts; with hands that labor for the weal of others; with eyes full of confidence lifted up to the pure ideal of humanity.

# DEPARTMENT OF INDUSTRIAL EDUCATION.

WEDNESDAY AFTERNOON, *July* 15, 1885.

The first session of the Department of Industrial Education was held in the Second Baptist Church at 3 P. M., July 15, 1885. President H. H. Belfield, Chicago, Ill., occupied the chair. The President announced :

## *THE REPORT ON THE PROGRESS OF INDUSTRIAL EDUCATION DURING THE YEAR ENDING JULY* 1, 1885.

BY PROFESSOR S. R. THOMPSON, NEW WILMINGTON, PA.

AT the meeting held in Chautauqua in 1880, on motion of President Folwell, of Minnesota, it was voted that "hereafter it shall be the duty of the Secretary of this Department to procure statistics of the condition and progress of Industrial Education during each year, and report the same to the Department at its annual meeting." In accordance with this action, the following report has been prepared and is respectfully submitted. Though brief and incomplete, it has required a large amount of correspondence to procure the facts which it embodies; and your secretary takes this opportunity to thank the gentlemen who have so courteously responded to his request, and to express his regret that it is impossible within the space allowed here to mention individual names. When, ten years ago, some of us proposed the organization of this section of the National Association, there was much doubt expressed as to the possibility of sustaining a department devoted to industrial education. The increased and increasing attendance upon this section from year to year, the growing zeal and enthusiasm of its members, have certainly justified the formation of the department. It is doubtful if any educational movement has ever risen so rapidly in public estimation, taken a deeper root in society, or has been embodied in a greater number of permanent institutions than has industrial education in the last ten years.

In reviewing the work of the past year, it has been the aim of your secretary to present such facts as show progress. To discuss the condition

of industrial education would require more time and space than could be given to it here. The utmost brevity consistent with clearness has been aimed at. Should the section desire fuller details regarding any of the enterprises here mentioned, such details may be obtained in many cases from the representatives of the institutions now present.

For convenience of comparison, the same order of topics will be followed as in previous reports.

I. New schools for Industrial Education opened during the year :

1. The Chicago Manual Training School was opened in February, 1884, but not having been previously reported in this connection, deserves mention here.

The first class numbered 72 pupils ; the second class, which was admitted in September, brought the number up to 146. This school is well equipped, admirably managed, and highly successful. Students are admitted on examination, and while engaged in learning manual arts, do not neglect mental training. In the words of a publication by the school, it is "a high school with manual training added."

2. The Toledo Manual Training School, opened during the year, was founded in part, at least, upon bequests by Jessup W. and Susan Scott. The general plan of operations is to be substantially the same as that of the Manual Training School of St. Louis, after which the Toledo institution is modeled. The directors in their announcement say that "one great object of the school is to foster a higher appreciation of the value and dignity of intelligent labor, and the worth and respectability of laboring men." "All the shop-work is disciplinary; special trades will not be taught, nor will articles be manufactured for sale."

The course of instruction occupies three years, and includes a good range of scientific, literary, and mathematical studies besides the manual training.

3. The Hebrew Technical Institute, 129 Crosby Street, New York, was founded to turn the attention of Jewish boys toward the field of industry. The first year of regular work closed recently with public exercises. The institution has been successful from the start. It is supported in part by the liberality of some Jewish citizens of New York, and in part by three Hebrew charitable associations. Instruction is given in Free-hand and Mechanical Drawing, Mathematics, Physics, the English Branches, Wood-Turning, Wood-Working, Metal-Working, and Modeling in Clay. Manual arts not trades are taught. Instruction is free to all Jewish boys from twelve to fifteen years of age.

4. The Baltimore Manual Training School has been recently opened, but few particulars in regard to it have been received. It was opened January 15, 1884, and has been continued with increased facilities during the year just passed. It is, so far as I am informed, the first instance of a

fully equipped training school supported by public taxation. It is a free public school, with a course of work and study essentially like that of the St. Louis Manual Training School.

5. The Newark Technical School, located at Newark, New Jersey, was opened in February, 1885.

This school was organized under an act of the legislature of 1881, and is supported one-half by money from the State treasury, and the other by individual contributions by citizens of Newark.

Graduates of the city Grammar Schools are admitted without examination, but others must submit to a competitive examination. At the opening 102 students were admitted, and a larger number are now ready to enter in the fall. The courses of study are from three to five years. Special attention is given to industrial drawing, physics, chemistry, and such other studies as are of special importance to persons engaged in mechanic arts or trades of any kind. As most of the students are engaged in some kind of labor in the shops of the city during the day, instruction is given only in the evening; and for the same reason no manual training is given in the school. The director, who is himself a skilled mechanic, devotes a portion of his time every day to going about among the shops in which the pupils are at work, and thus becomes acquainted with them in their working habits and better fitted to adjust the school administration to their wants. The instruction is given only during the months of October to March, inclusive.

It will be seen that this school possesses some peculiar features, and is in some sense a new departure in technical schools. Technical instruction in some form is not unknown in night schools, but a permanent organization of this extent and complexity seems to be new among such schools.

II. The establishment of new industrial departments in schools hitherto organized:

1. The Agricultural College of Mississippi has opened a department in which the principles and practice of dairying in all its branches are taught.

The arrangements completed are on a liberal scale, and the enterprise is of peculiar interest as the first complete school of the kind in America.

The same college has also greatly enlarged its Horticultural Department during the year.

2. Girard College, at Philadelphia, has opened a new Technical Department within the year. For this department a building has been erected and fitted up with a sixty-horse engine and all suitable tools. It is not the intention to teach trades, but to teach boys to handle and use the leading tools of the trades. It has been remarked that this movement is strictly in accord with one clause in Girard's will, where he expresses a desire that the boys shall be taught the various branches of a sound education, and adds: "I would have them taught facts and things rather

than words and signs." Only those boys who show adaptedness to the work are to be employed in this school.

3. Purdue University, at Lafayette, Ind., has made important additions to its industrial departments during the year, especially in the direction of wood and iron working. A new building adapted to this work has been erected.

4. The Michigan Agricultural College will open a complete mechanical department for the first time the coming fall.

5. Emory College, situated at Oxford, Georgia, began instruction in wood-working tools October, 1884. Some $9,000 has lately been invested in tools for working in wood and metal.

6. The New York Trade Schools still continue with increasing usefulness. Mr. R. T. Auchmuty writes concerning them as follows: "During the past year the attendance was 200. Many of the pupils were friends and relatives of those who had previously attended the schools. No difficulty has been experienced in finding work by the young men of the Trade Schools. Last year I employed 13 of the young men of the bricklaying class with two journeymen to build me three stores on 125th Street. This year I have 17, with four journeymen, building me a house, corner of Ninety-third Street and Ninth Avenue. This work is considerably better than the average.

"I have made an arrangement with the Master Stone-Cutters' Association which will open that trade to young men who go first to the New York Trade Schools. The journeymen stone-cutters have also been friendly.

"Although the plumbing class has been largely composed of 'helpers,' I have had a number of young men, among whom was one from Vermont and another from Georgia, who have done wonderfully well.

"The carpentering class, which was new, was also satisfactory.

"My system is to teach enough to enable a young man to earn half wages, to ground him thoroughly in the science and practice of a trade, and leave experience and quickness to be acquired at real work after leaving the schools.

"The expenses largely exceed the receipts."

Several industrial schools not yet opened for pupils are in such a state of forwardness as to be opened for work in September next. Among these may be mentioned:

The Baltimore and Ohio Railroad has made arrangements to open a Technological School at Mt. Claire, Baltimore. The school is intended for the training of apprentices for the various employments connected with this great railroad. Students will be admitted on examination, instructed three years, and promoted as fast as their attainments and merits seem to justify.

This is a new departure for a railroad company, yet the careful

student of industrial education must commend it as a liberal and wise movement.

The School Board of the city of Philadelphia has arranged to open a manual training school at the beginning of next school year. The arrangements are all completed, and the work will begin in September. This school, it will be observed, is established by the Public School Board, as a part of the public school system of the city. I believe it is the second instance where the public school authorities have taken this action, and established such a school on the proceeds of taxation. In its announcement the School Board says:

"The University of Illinois, until the present year known as the Illinois Industrial University, has lately added to its facilities for industrial training a foundry with accommodations for teaching 16 pupils in one class the art of molding in sand.

"It is intended for boys who have finished the Twelfth Grade, or any higher grade, of the Grammar School Course. The instruction will embrace a thorough course, so far as it goes, in English, Mathematics, Freehand, and Mechanical Drawing, and the fundamental sciences; but in addition to these branches, a carefully graded course of manual training will form a leading feature of the school. This manual training is intended to give the boys such a knowledge of the tools and materials employed in the chief industrial pursuits of our time as shall place them in more direct and sympathetic relations with the great activities of the business world. The school will make our public education not only more complete and symmetrical in character than it has been heretofore, but it will be at the same time better adapted to enable the pupils to win their way in life. No matter what future a parent may have marked out for his boy—whether he be intended for an industrial, a mercantile, or a professional occupation, it is believed that such an education will be of immense advantage to him. Upon the industries of the world, to a much larger extent than ever before in its history, depend the progress, the prosperity, the happiness of society. To prepare boys for this condition of things will be the aim of this school. The entire course of instruction and training will be *practical* in the largest and best sense of that term. The culture it gives will include the hand as well as the head, and its graduates will be trained to work as well as to think. The course will extend over a period of three years, but it is so arranged that boys whose intended pursuits in life will not warrant spending so much time, may participate in its advantages for a shorter period, before entering upon other studies or a permanent occupation.

"The Manual Training School has been organized in response to a growing sentiment respecting the character of public education which has been strongly manifested in Philadelphia, and the Board of Public Edu-

cation believe that the movement, when fully understood, will meet with the cordial approval of our people."

I am informed by City Superintendent MacAlister (whose strong hand it is not difficult to see guiding this important movement) that it is not the intention to establish only a single school, but that the one to be opened in September is the type of a number to be located in different portions of the city. He adds that they are now reorganizing the "Industrial Art School," heretofore known as the "Leland Art School."

The Agricultural College of Alabama, at Auburn, has now completed arrangements to open a Mechanical Department in the fall. It will be modeled after the pattern of the Mechanical School of the Massachusetts Institute of Technology, and the Manual Training School of St. Louis.

III. The general drift of public opinion on the subject of industrial training:

I wish there was room in this report to publish the cheering and hopeful words which come to me from all quarters, and which speak so strongly of the rapidly increasing interest in the work of industrial training.

But a few utterances in this direction must serve as samples of all.

Hon. Justus Dartt, Superintendent of Public Instruction of Vermont, says: "Public opinion is moving slowly and steadily in favor of technical training." Ex-President R. B. Hayes, in an address at the opening of the Toledo Manual Training School, said: "I am satisfied, after very full investigation, that for mere scholarship, the training of the industrial school is essential."

The Industrial Education Association, lately organized in the city of New York, is a striking indication of the increasing interest felt in industrial and technical training. This organization contains in its membership many of the leading men and women of the city. Its declared purposes are: 1. "To obtain and disseminate information upon industrial education and to stimulate public opinion in its favor. 2. To promote the training of both sexes in such industries as shall enable those trained to become self-supporting. 3. To study and devise methods and systems of industrial training and secure their introduction into schools. 4. To provide instructors for schools and classes, and, if necessary, to train teachers for this work."

The result of the first year's work has been such as to encourage all connected with the organization, and to justify high hopes of future usefulness.

Mr. S. S. Parr, Editor of *School Education*, Rochester, Minn., in a communication, says:

"Almost all our systems of town and city schools are doing something on industrial work. In Minneapolis, St. Paul, Winona, Rochester, Red Wing, Duluth, etc., industrial drawing is taught. In Winona,

Rochester, and St. Paul whittling and paper-cutting work is done. This involves the whittling of simple forms, as of saws, hammers, wheels, chairs, etc., from soft wood, either after models or drawings. A great variety of designs are cut in paper. Some of these are industrial; some artistic. Modeling in clay, putty, and sand, partly industrial and partly illustrative, is carried on in all our larger systems of schools. There is a great demand for all kinds of industrial work."

The School Board of Omaha, Nebraska, in January last appointed a committee to consider and report upon the advisability of introducing manual training into the high school of that city. This committee having reported favorably, it has been decided to open the school next year.

The State of Iowa has a law encouraging industrial exposition in connection with public schools. The aim of these exhibitions is to encourage industrial exertion and the acquisition of industrial skill by the pupils of the public schools.

Two States, Wisconsin and Nebraska, had bills before the last sessions of their legislatures to separate the Industrial Colleges from the State Universities, with the design of making the colleges more strictly industrial. Though this measure failed for the time, it is certain to be renewed, and is sure ultimately to prevail. The great industrial public will not always consent tamely to see the national grant, made for the promotion of industrial education, diverted either to the endowment of research, or the education of a select few in the higher walks of applied science, while the great mass, for whom the grant was made, are excluded from direct benefit. No one can read the proceedings of Congress, in connection with the land grant of 1862, without seeing that *that* grant was made especially for the advantage of the working classes, and that it is a perversion of its funds to apply them to support schools for professional training.

IV. Bequests or donations for the promotion of industrial education:

Mrs. W. W. Boardman, of New Haven, Conn., has given $500, to be expended next year in experimenting with industrial education in the public schools. She has also signified her intention to give the sum of $5,000 to form a fund to carry on this work for some years.

In this connection mention may be made of the use, in the Salem, Mass., Normal School, of a set of tools owned and contributed for use by Mrs. Marion Hovey, of Boston.

Of the experiment, Daniel B. Hagar, Ph.D., writes, that he has had the tools two years, and that for six months a teacher was employed to give instruction in their use. Mr. Hagar writes: "The young ladies of the school gladly accepted the opportunity offered them. The number of applicants for the novel instruction has always been larger than could be accommodated. Five classes, each numbering twelve pupils, have been

nearly all the time under instruction. They devote to the industrial work only an hour a week, outside of the regular school time. They learn to use hammers, saws, planes, augers, squares, etc. The young ladies are much interested in the work. It serves them as a relief from their usual intellectual labor ; it gives them excellent physical exercise in a very entertaining way; it gives them practice in manipulating with tools, and thus tends to enable them the more readily to manufacture apparatus for the illustration of various departments of school study. It trains the eye and hand, and, in general, it gives the pupils confidence in their ability to do many useful things for themselves."

I am satisfied that the training thus obtained is highly valuable.

As the introduction of any form of industrial training into a normal school is a somewhat novel event, I venture to give a brief statement of another experiment of the same kind, in another normal school of the same State. This brief account was written at my request, by Mr. Boyden, principal of the State Normal School, Bridgewater, Mass. The school has seven laboratories, two physical, two chemical, one mineralogical, one biological, and an industrial laboratory.

The industrial laboratory is a room 32 feet square, furnished with nine carpenter's benches of a special pattern, and nine sets of tools, and a turning lathe with a circular saw and jig-saw attachment. In this laboratory the students are taught to use tools in making apparatus for use in the other laboratories and in the different studies of the course. The laboratory is under the charge of a teacher who takes the students in sections of nine or ten for regular class work. Each student has a course of lessons in this laboratory, beginning with the first term of the course, and has the use of the laboratory throughout his course under the direction of the teacher.

This work enables the student to supply his own wants in providing for himself the means of illustration for his own teaching in the Normal School, and in securing inexpensive apparatus for use in his own school. The students pay for the stock which they use and take their apparatus with them as they leave the school. This practice stimulates observation and thought, develops invention, and cultivates self-reliance.

The John F. Slater fund of one million dollars, given to promote the education of negroes in the Southern States, has lately become available, and some forty thousand dollars of its income have been distributed during the year. It is used principally to aid schools already established, and preference is given to such institutions as have industrial departments. During the year upwards of twenty schools were aided by the donation of sums varying from five hundred to three thousand three hundred dollars. The good effects of this policy in stimulating the extension of industrial training in the South are already widely manifest, though the

work is but begun. Thus far hard tools chiefly make the equipment, but some schools are preparing to introduce machinery. Girls are taught sewing, laundrywork, cooking, nursing, and housewifery generally.

The St. Louis Manual Training School has had a recent endowment of $115,000.

It will be remembered that this school was opened, and its continuance for five years was guaranteed by certain munificent and intelligent citizens of St. Louis. But the work of endowing it begun, its sure progress will make it permanent. In regard to this a St. Louis gentleman writes me: "Our school is no longer a mere experiment. Our leading citizens and business men recognize the value of both its mental and manual training. As a result, there is a great demand for our boys to fill valuable and responsible positions."

V. Miscellaneous items showing progress:

The Spring Garden Institute of Philadelphia has about completed the endowment of an industrial department on a liberal scale. No particulars, however, have been learned.

The Connecticut State Normal School at New Britian has had an industrial department on a small scale open during the year.

The Kansas State Agricultural College has enlarged and strengthened its industrial department for women during the year.

Of the industrial work in the Dwight School of New Haven, Conn., L. L. Camp says: "We have now some kind of industrial or handiwork for each grade from the kindergarden to the highest class."

The Mechanical Department of the Massachusetts Institute of Technology has had steady progress during the year with greatly increased facilities. This was the first school in the United States to adopt what has been called the Russian system of teaching manual arts, and its continuance and distinguished success is a matter of congratulation to all friends of industrial education.

The Illinois University, heretofore known as the Industrial University, has increased its facilities for industrial training by the addition of a foundry, which, accommodations supplied, will allow of the instruction in molding of sixteen students at one time.

The Legislature of the State of Mississippi has appropriated forty thousand dollars for a State Industrial college for women. No details of progress received.

Tulane University, at New Orleans, is to have an industrial department. The papers some time ago noted the fact that Professor J. M. Ordway had been invited to assume the work of organizing the department.

A Manual Training Department has lately been established in the State Reform School at Portland, Maine.

The College of the City of New York has just established a Manual Training Department.

Mrs. W. S. Hoyt, daughter of Chief Justice Chase, has established a flourishing industrial school at Pelham Manor.

The Workingman's School of New York, under the management of Professor Felix Adler, has continued its good work during the year.

The Boston public schools have continued the experiment of giving instruction in carpentry during the year; two hundred boys having been selected from the grammar schools for the purpose. The Superintendent reports that, "The interest in their work shown by the boys is very lively, such as I have seldom seen surpassed in any other kind of school work. Many boys come to the shop afternoons an hour before the appointed time and get the teacher's permission to work three hours instead of two. Some, seeing the gas-fixtures provided for use in dark days, and fancying that instruction was going to be given in the evening, begged to be allowed to come and work then as well as in the daytime."

The City Superintendent, Edwin P. Seaver, says in conclusion, "The experiment has already gone far enough to prove that work of this kind can be joined to the ordinary grammar-school work with good effect. Considering the care and skill with which this trial was made, this conclusion is eminently noteworthy.

More or less of industrial training has been introduced in a number of schools, as I learn from incidental mention in the educational papers, but particulars have not been received. The following may be mentioned:

Barnesville, Ohio, public schools;
Moline public schools, Illinois;
Peru (Ill.) public schools;
Lake View High School, Illinois;
Cook County Normal School, Illinois;
Milford High School, Massachusetts;
The Montclair Public School, New Jersey.

The first report of the Industrial Education Association of New York gives a list of thirty-one schools in that city in which industrial education is furnished. The limits of this report will not allow particular mention of these.

In the discussion of Professor Thompson's report, President Fairchild of Kansas expressed a wish that a statement of the increase in the amount of money invested in industrial education from year to year be made a portion of the Secretary's report; a statement was made with reference to such increase in the Kansas Agricultural College.

A gentleman from Boston offered a report of the work done in the Boston Cooking School. His statement to the effect that the institution was well established and doing regular work was well received.

General Eaton, Superintendent MacAlister, Professor Ordway, and others, took part in the general discussion of the report, and Professor Ordway, on request, gave an account of the organization of Tulane University at New Orleans. He said in substance, that when it was decided to introduce manual training into the new university, Mr. Tulane promptly gave an additional $50,000, to provide for the work. A year has passed and good progress has been made. Mention was also made of the Lowell School of Design in Boston, Mass., where instruction in designing and practical weaving is given.

The President here announced, as a committee for the nomination of officers for the coming year, George T. Fairchilds, A. J. Morrison, and R. H. Miller. Later in the day the committee reported the following recommendations: For President, James MacAlister of Philadelphia; Vice-President, John W. Ordway of New Orleans; Secretary, W. F. M. Goss of Lafayette, Ind. On motion the report was adopted.

Mr. Charles H. Ham of Chicago was introduced, and read a paper, of which the following is an abstract:

# THE EDUCATIONAL VALUE OF MANUAL TRAINING.

BY CHARLES H. HAM, CHICAGO, ILL.

BACON'S definition—"Education is the cultivation of a just and legitimate familiarity between the mind and things"—was adopted as the basis of the discussion. That of Pestalozzi was quoted as identical in purport—"Education is the generation of power." The lecturer's definition of education was: "The development of all the powers of man to the culminating point of action—action in the arts." Then followed the interrogative proposition: "And this power in the concrete—the power to do some useful thing for man—is not this the last analysis of educational truth?"

Civilization and education are convertible terms. Civilization is the art of rendering life agreeable, and art products constitute the basis of the comforts of civilized life. In a word: The great gulf between the savage and the civilized man has been spanned by the seven hand tools. Hence tools constitute the great civilizing agency of the world; and, therefore, the ultimate object of education is the attainment of skill in the arts; for it is through the arts that all branches of learning find expression.

Science and philosophy, then, are merely means to an end—the end pointed out in Bacon's aphorism: "The goal of the sciences is the endowment of human life with new inventions and riches."

The hand is the organ of wisdom, and the training of it reacts upon the mind. The illiterate apprentices of England who developed into great discoverers, inventors, and constructors, and became learned men at the same time, were cited in support of the proposition; also the testimony of modern instructors in manual training institutions. The hand is the organ of power, for it wields the mechanical forces. England has been made great, not by statesmen and legislators, but by civil engineers, inventors, discoverers, and mechanics. And these men were educated, not in the schools and colleges of England, but in her workshops and private technical educational institutions.

The neglect of the governments of the world to provide for education in and through the arts shows how far-reaching has been the baleful influence of Plato, who said: "All the useful arts, I believe, we thought degrading." The hand is the organ of truth. It tests the speculations

of the mind. It searches for the truth in things and finds it. The mind indulges in false logic without instant detection. But for the hand to work falsely is to produce a misshapen thing, which, in its construction, gives the lie to its maker. In a word, "The hand is scarcely less the guide than the agent of the mind. It is the mind's rudder, its balance-wheel. It is the mind's monitor. It is constantly appealing to the mind, by its acts, to hew to the line, let the chips fly where they may." The wisdom of the hand is accounted for by Sir Charles Bell's discovery of a "muscular sense"—a set of nerves bearing messages from the hand to the brain, as the complement of the set of nerves which bear messages from the brain to the hand.

Out of this proposition springs its corollary, namely: The hand is a potential moral agent, for it is able to show to the mind in things the beauty of truth and the hideousness of falsehood.

The hand is the preserver of the power of speech. Connected thoughts depend upon words, and words upon objects; and all artificial objects owe their existence to the hand. Hence, if the hand should cease to labor in the arts, the scope of speech would finally be restricted to the expression of the wants of savages subsisting on the native fruits of field and forest.

The disposition to undervalue the hand is an inheritance from the speculative philosophy of the ancients. Plato regarded the soul's residence in the body as an evil. The effect of this false doctrine has been the degradation of manual labor; and it is not less absurd than wicked to treat manual labor with contempt, since to it we owe all the visible results of civilization.

Mechanics stand the test of scrutiny better than merchants; civil engineers and architects are more competent than railway managers, lawyers, judges, and legislators. Why? Because the former are educated in the world's workshops and institutions of technical instruction; they are trained in things, while the latter have only the automatic word-training of the schools. Ninety-seven merchants in one hundred fail; lawyers and judges produce a most pitiable wreck of justice, and the statutes of legislators wear out in a year. But every locomotive that leaves the shop is perfect; bridges last a century, and the works of architects and builders stand as monuments of skill and fidelity long after their makers are turned to dust. The cause of these failures is this: Subjective mental processes (the word-training of the schools) are automatic, and hence they neither generate power nor promote rectitude. They enfeeble rather than energize the brain. Ideas and things are indissolubly connected, and a system of education which separates them is fundamentally defective. Why store the mind with facts which are useless until applied to things, if they are not to be applied to things? And if they are to be

applied to things, why not teach the art of so applying them? The system of education that does not do this is one-sided incomplete, unscientific.

Selfishness is the arch-enemy of virtue; from it all forms of immorality spring, and its last analysis is total depravity. But the literature of all the ages, which is the fruitage of education, is full of maxims in honor of selfishness. Napoleon the First was the very incarnation of selfishness, and Emerson declares that "Every one of the million readers of anecdotes, or memoirs, or lives of Napoleon, delights in the page, because he studies in it his own history." It would be impossible to draw a more sweeping impeachment of prevailing methods of education than this of Mr. Emerson, for the millions who read their own history in that of Napoleon are what education has made them.

A system of education consisting exclusively of mental exercises promotes selfishness, because it is subjective; its effects flow inward; they relate wholly to self. All purely mental acquirements become a part of self, and so remain until transmuted into things through the agency of the hand.

But manual training promotes altruism, because it is objective. Its effects flow outward; they relate not to self, but to the human race, and so exert the natural reflex moral influence of a good act upon the mind. Morality is a vital principle whose exemplification consists in doing, not merely thinking, justice. It follows that morality can no more be acquired by memorizing a series of maxims than the art of using tools skillfully can be acquired by studying the laws of mechanism.

## DISCUSSION.

The discussion of Mr. Ham's paper was opened by Mr. MacAlister, who thought it a remarkable circumstance that such a paper should have been prepared by a layman. He thought that the teachers of the day are strangely conservative, and but for their resistance manual training would soon be introduced into the public schools. Education has always been the product of the time and must be adapted to it. The question now is, how shall we manage to introduce industrial education into all the schools—not merely in technical schools, but into the general course of school work so that all shall be partakers in its benefits.

President Fairchild was heartily in sympathy with the idea of manual training, but thought that some of the statements of the paper were too broad and sweeping. He thought the great aim of education to be to unite the skillful hand with the thoughtful brain so that each would materially aid the other.

Mr. MacAlister referred to the fact that chemistry, physics, biology, etc., have their laboratories, and he insisted that now we must take hold of the principles of mechanical work.

Mr. Hitz stated that, in going through the New Orleans Exposition, he was surprised to see how much the products of the mechanic arts exceeded those of agricul-

ture. Four-fifths of the workers among men are farmers ; he hoped that the instructors of our agricultural colleges would be better represented at future meetings.

Meeting adjourned.

## SECOND SESSION.

FRIDAY AFTERNOON, *July* 17, 1885.

After calling the meeting to order President Belfield announced that Dr. Magoun, who was to deliver the second paper of the afternoon, would not be present, and that, consequently, his part would be omitted. Prof. W. F. M. Goss then read the following paper, which was illustrated by means of suitable charts :

# AN OUTLINE OF TECHNICAL WORK FOR A MANUAL TRAINING SCHOOL.

BY WM. F. M. GOSS, LAFAYETTE, IND.

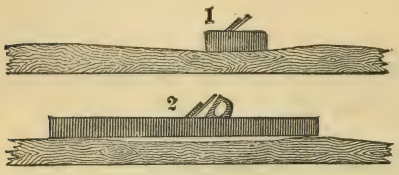
In presenting this paper, I wish to be understood as simply giving, in the interests of manual training, one view of technical work, by unfolding a plan which has, it seems to me, been very successful. To do this I shall give much of my time to the illustration of methods because I believe that the value of any course of instruction depends less upon its make-up than upon the character of its administration.

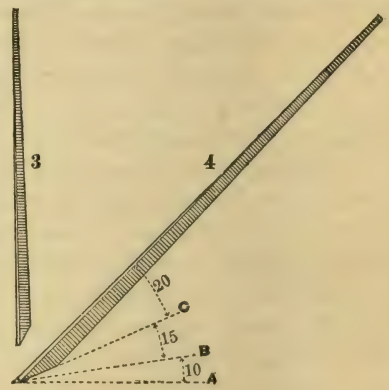
In arranging a course of technical work for a manual training school, I would give shop practice the chief place, with mechanical drawing on one side and explanatory instruction, or what I have more frequently called supplementary instruction, on the other. In the distribution of time, one-half of the total would be allotted to shop work, the other half divided somewhat unequally between the drawing and the supplementary instruction, a preponderance being given to the drawing. Assuming that we have at our disposal fourteen hundred hours, half of which is to be given to shop work, I would make the latter include the following lines of practice: bench work in wood (or carpentry), wood turning, pattern making, molding and casting, iron and steel forging, vise work in iron, and machine work in iron. My reasons for selecting these rather than others will be stated after I have more fully developed my scheme, and as I proceed I will give the proportionate amount of time to be devoted to each of these lines.

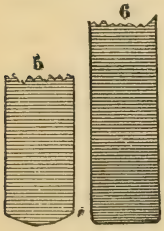
Our first subject is bench work in wood. In the class-room, under the head of supplementary instruction, the various bench tools are taken up, explained, and discussed. To assist in this, there may be employed besides the tools themselves, blackboard sketches, enlarged models showing form of cutting edges, and sectional models showing the arrangement of parts. For example, let us make a hasty examination of the carpenter's plane. You will see by the diagrams 1 and 2, the effect of increased length of the stock. The short plane, as shown by No. 1 will follow the irregularities of the work, rising over bunches and settling into hollows, and produce no great change in the surface, while a long plane as shown

[NOTE: When too late for correction, it is discovered that the illustrations which appear with this paper are in so great a degree imperfect, that in some cases they fail in a measure to convey the information expected of them.]

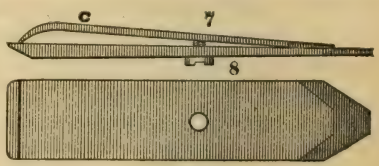
by No. 2 will cut only on the high parts, and by so doing tend to produce an unbroken surface. Here the question may naturally occur to the student, "Why not always use a long plane?" and it may be explained that in our haste, we frequently desire to produce a surface which we do not care to take time to make exactly straight. Continuing our examination, we shall find that the cutting bit of the plane is iron overlaid with steel as shown by the different coloring in No. 3. It is set in a stock at an angle of about 45° with the sole of the plane represented by the line *A*, No. 4, ground at an angle of about 25° as indicated by the line *C*, and whetted at an angle of 10° as shown by line *B*, thus making the angle of the cutting wedge equal to 35°. (In practice we do not always maintain the cutting wedge at this angle but we may assume such a figure to give definiteness to our ideas until practice develops an understanding of what is right and wrong.) The outline of the face of the plane bit may be considerably curved as shown by No. 5 or nearly straight as in No. 6 according to the character of the work expected of it. Most plane bits have fastened to them a supplementary iron or "cap" as it is called, indicated by *C* in the two views Nos. 7 and 8, the purpose of which, as will be seen by reference to No. 9 which shows a single bit, and No. 10 which shows bit, and cap, is to break the shaving as soon as possible after it is cut from the timber, and so prevent, in case of obstinate grain, a gain of leverage and consequent roughness of surface.



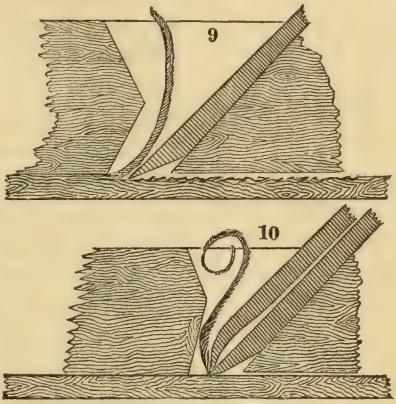



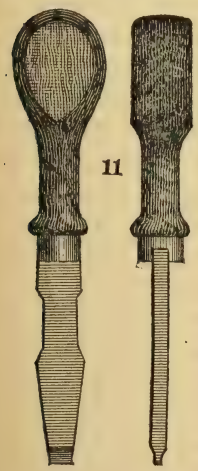




I have illustrated these points to show that there are facts concerning every tool with which the student must be familar before we can expect satisfactory results from his use of it. Let him know a plane theoretically, and he will not attempt to straighten a plank with a smooth plane or smooth a surface with a jack plane. Even the most simple tool, the screw driver shown by No. 11, may profitably be made the subject of some instruction in the class-room. The end which should fit the head of the screw is too often



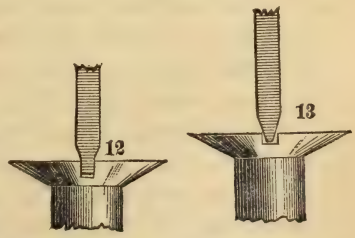
found wedge-shaped, as in No. 13, so that the least pressure tending to turn the screw also tends to raise the screw driver from its place. It should be more like No. 12. Having in like manner mastered all the bench tools, we may next turn our attention to forms which, by the aid of tools, we shall produce in the shop. Let us suppose the first shop exercises to consist of a series of splices. In the class-room, we consider different typical forms of such joints and the peculiar adaptation of each; attention is called to the arrangement of the abutting surfaces, the proportion of parts, and the character of fastenings, and notes and sketches are made by the student on all these points. After splices we will take up mortise and tenon joints, dovetailed joints, and so on through the whole line of elementary construction, until between two timbers or boards coming together at known angles, under given conditions, the student will be able to make a proper joint. The object of all this is to give the student information which in the shop will guide every stroke of the chisel intelligently, so that besides being able to cut to line, he may also be able to make the line. The course should in like manner include descriptions of common structures such as doors, frames, simple steps, floors, walls, and roofs.



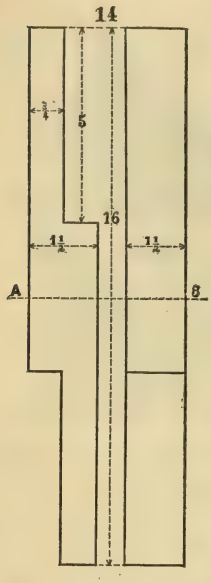




A secondary value of considerable importance in this instruction is found in its effect on the student's powers of observation. If he is told that the parts of a door are usually joined in a certain way because of reasons given, he is at once tempted to put the statement to test by an examination of all the doors within reach.

Leaving for a time the supplementary instruction, we will next examine the first work in drawing. In the method employed, much will be gained if, from the beginning, we have all sketches and drawings *mechanical;* that is in orthographic projection, consisting only of plans, elevations and sections. At first, the subjects may be bench tools from which such sketches as I have shown, the shading

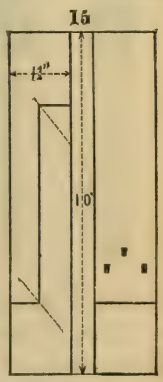


omitted, may be made for the purpose of illustrating notes as well as for practice in drawing. Following these, different forms of joints may be drawn which afterward can be used in the shop as working drawings. Nos. 14 and 15 are representations of such drawings ; they also illustrate a shop method. The student in making a halved splice makes the proper lines and produces a piece in accordance with No. 14 which, when completed, is cut by the instructor on the line *A B* and the accuracy of the previous work tested by trying the parts together as they are intended to fit as shown by No. 15.




After a few weeks of sketching of this character, during which time the student grasps the idea of seeing a solid in its projections, and acquires the ability to place measurements where they are most needed, pen drawings to scale from subjects similar to those already mentioned may be undertaken.

We are now prepared to discuss the first work in the shop. The student may understand many important facts about the tools which he is to use, and his knowledge of the drawing may be such that he can see clearly the extent and character of every surface, but now he is to put his information into practice, for the first time. Lines must be made on the work from the dimensions of the drawings. Concerning these and their production, he should have the fullest instruction, since it takes some time for a student, particularly one who has dabbled with tools, to understand the value of a line rightly placed. With boys eager to see the shavings curl from their planes, it is natural enough that there should be a desire to drive ahead on any plan that seems likely to give the desired result, and anything that wears the garb of system is especially distasteful. Here it is necessary to demand attention and insist that method shall be the order of the day. Thus during the most of our course in bench work in wood, it will be found best to hold the student to work out the will of the instructor in every detail. Having once brought him to a proper understanding of the problem, much more latitude may be given.




As to the nature of our bench work, a series of joints, such as splices, mortises and tenons, dovetails with practice in paneling, model making, or some small work of construction may be undertaken with advantage.

I have now illustrated the details of the three important factors of our bench work, which altogether may occupy about .13 of the time allotted

to technical work, or 182 hours (total time assumed to be 1,400 hours), 91 hours of which being given to shop work.

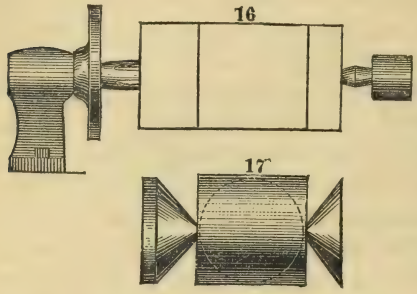
It is to be understood that throughout the entire course these three lines of work, the instruction, drawing, and shop work, are pursued together, and supplement each other wherever possible.

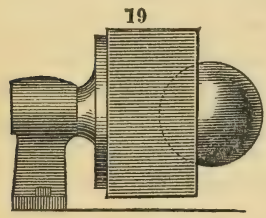
Continuing, then, will be wood turning, the object of which is to acquaint the student with the lathe, and give him some practice in the handling of tools. To this end, the supplementary instruction directs attention to the construction and adjustment of the latter, and to such appliances as are commonly used in connection with it. The lathe speeds with driving belt in different positions are observed, and sketches are made, showing form of bearings and provision for their lubrication. The student in this way becomes perfectly familiar with every element upon which he depends for his results. He applies oil where oil is needed, and adjusts the machine where the designer intended adjustments to be made. There is a wholesome lack of such mismanagement as sometimes manifests itself in oil, which has been injected into center holes entirely remote from moving surfaces, or in the impatient winding of the hand-crank of the tail stock that produces no motion in the spindle, which has already passed beyond the limit of its intended travel. Such blunders, and the serious results that frequently follow their commission, are most exasperating to the shop instructor, and their elimination should be systematically labored for.

As to the work in the shop, there are four principles which appear to cover well the ground of elementary practice in turning. The first is practice in straight turning, with the gouge and chisel; the second adds to the first practice in "cutting in," *i.e.*, producing surfaces at right angles with the axis of the work; the third adds to the first practice in producing convex curves with the chisel; and the fourth adds to the first practice in producing compound curves with the gouge. When pieces involving these four principles can successfully be made, the student has acquired a very good handling of the tools; to increase his skill, that he may work faster and with more certainty, a few handles, a mallet, or any similar work may be undertaken. Too much time, however, must not be spent on work that is held between the centers, as some practice should be given in chuck work (*i.e.*, work that is held and revolved by the headstock of the lathe alone). To define my meaning I will take a single illustration:

One of the most difficult things to turn is a ball. The first step in the process is to reduce the piece to a cylinder whose diameter is equal to that of the desired sphere. Two lines are made around the circumference at a distance apart equal to the diameter of the cylinder all as shown by No. 16. Next the piece is cut down as shown by No. 17 and afterward rounded as indicated by the dotted line. But we shall not expect to make it perfect, and therefore when we have tested our eye and our patience to our satis-

faction, we cut the embryo sphere from its ends (No. 18), and proceed to approach it from another direction. We screw to the face plate of the lathe, as shown by No. 19, a thick disk of wood which we turn on the outside until it is balanced, after which we cut a hole as indicated by dotted line, having its diameter nearly equal to that of the ball. Now it is evident that since we cut this hole by the lathe motion, while the block is fastened in position on the face-plate, that the hole must be round and concentric with the lathe's motion; it is also evident that a true sphere would fit into this hole, as shown by No. 19, and would turn on a diameter as an axis, *i.e.*, all parts would run concentric with the lathe's motion. But our partially completed sphere when squeezed into the chuck will not run true; nevertheless, we put it in and turn such parts as are exposed, until the line of the cut runs clear around the work. We shall then change its position in the chuck, and operate on other parts, and so continue until the work fulfills the requirements of a true sphere. The cutting is then complete, and the ball may be polished as it was turned. This indicates the range of chuck work. The more practice a student has, the more of course he will know about turning; but much can be acquired in a very short time. About .07 of the whole time, that is about 49 hours, will be sufficient.

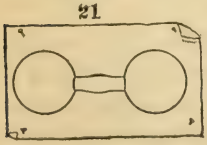





Having now mastered both the bench-working tools and the lathes, we are ready for pattern-making. The tools used are the same as in the two courses just named, so that we may enter at once into the technique of the art.

A pattern is a form, usually of wood, used to produce a mold in sand. For example:

Suppose No. 21 represents a drawing of a dumb bell (dimensions omitted) from which it is desired to produce a casting. (From the drawing, as a guide a pattern, No. 22, is made, and for convenience in molding the pattern is made in halves.) One-half of the pattern is placed upon a molding board, No. 23, and upon the molding board is also placed a frame or *nowell*, No. 24. The nowell is filled with sand, No. 25, and then turned over, exposing in its upper



surface that face of the half pattern which was placed upon the molding board, No. 26. To the half pattern buried in the sand (No. 26) is now added the second half, making the pattern complete, No. 27. A second

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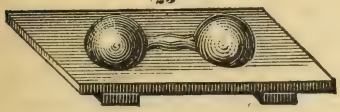

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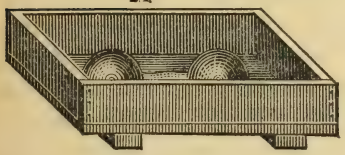

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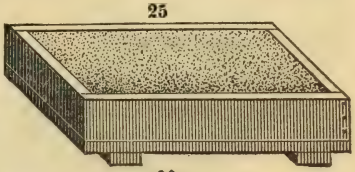

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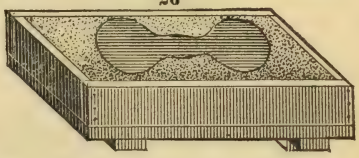

frame or *cope* is then added to the nowell, No. 28, which is also filled with sand, No. 29. This done the cope is removed and that face which is down in No. 29 turned uppermost, when its surface, like that of the nowell, will be found to contain the flat face of a half pattern. Each half of the

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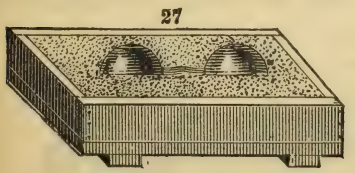

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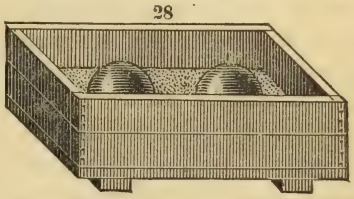

pattern is now drawn from the sand, leaving two halves of the desired mold, No. 31. A little channel or *runner* is next cut in the surface of the nowell, connecting the mold with a hole through the cope made by the pin in No. 29. The cope is now replaced upon the nowell, No. 32,

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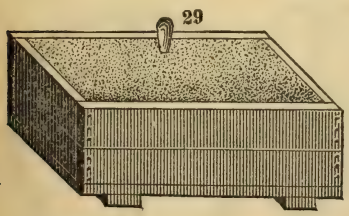

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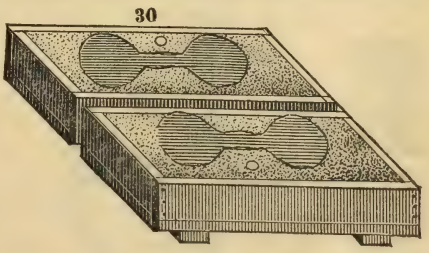
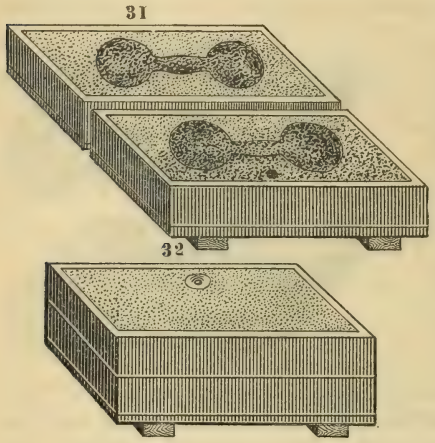


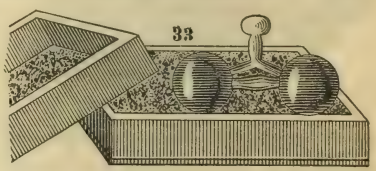
and the mold is ready for the metal which will be received by the hole shown in No. 32, made by the pin to which reference has already been made, and conducted to the mold. The metal cool, the mold is broken up and the casting, No. 32, exposed.

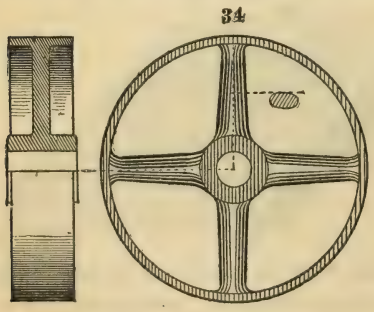
To understand pattern-making we must study the process of mold-making from patterns of different forms until we find out the possibilities

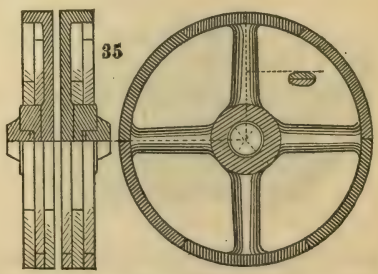
in molding, then we may reverse the direction of our efforts and begin making patterns of proper form to secure molds of any required shape.




This of course relates to the external form of the pattern, for, while in the illustration I have shown the pattern and casting are somewhat alike, where the form of the casting is complicated, the pattern may be quite unlike it, the discrepancy being made good by separate spits of sand, called cores, for which the pattern-maker must provide. We must also know how best to arrange the different pieces of wood of which the whole pattern is composed, so that there may be greatest possible strength consistent with the proportions of the pattern ; how to allow for shrinkage, for the casting will be smaller than the pattern ; and for distortions which result from unequal shrinkage. All these are subjects which may receive consideration in the class-room where causes may be explained and the effects clearly illustrated. Practice in the use of information thus acquired, may well be given by allowing the student to make drawings of patterns and core boxes for castings required, making such practice constitute the work for a time in mechanical drawing. Thus No. 34 may be considered a drawing such as would usually be furnished to represent a cast-iron pully, or belt




wheel, excepting that the dimensions are omitted. From this drawing, as a guide, the student may be required to make the drawing of a pattern, by the use of which, the casting, No. 34, can be obtained. If his work is well done, it will appear very much like No. 35. It will be seen that for con-

venience in molding this pattern, like that of the dumb bell, is made in halves; for proper strength each half of the rim is made up of three courses of segments, each course breaking joints with the next. Each course is made up of six segments, which number allows the grain in each to be straight, and yet makes the direction of the grain favorable around the entire circumference. This construction of the rim is necessary because of two things; first, if made of one piece it would be very weak across the grain, and second, since wood shrinks more across than with the grain, it would shrink more one way than it would the other, and by so doing become elliptical. In the place of the hole in the hub which is in the casting we have on the pattern projections, or "prints" as they are called, which make indentations in the mold for the support of a core. But I will not explain further; a student, however, who can make a drawing like this, and defend it against criticism, has acquired at least the elements of pattern-making. Supposing that the drawing is made, the student, as a pattern-maker in the shop, has now to employ tools with which he has become familiar, in shaping in wood the forms he has represented on paper. It may appear that work in the shop is rendered useless by the thoroughness of the work preceding, but this is not the case because of the great difference between drawing-room and work-shop construction.

Let the character of the pattern work be as varied as possible, without regard to uniformity of subject in the work of different students. The student who makes a pattern for a cast-iron column may learn as much as he who makes a pattern for a fly-wheel. Though the features of the pieces may be quite different, the essentials to be observed are the same. Moreover, a variety of work in progress at the same time offers to each individual student the advantage of seeing more than he could hope to *do* himself. As good a plan as can be found, I believe, is to make, or beg, or buy a complete set of drawings for some machine or appliance. These, after having had the students prepare drawings of the patterns and core boxes of each part, allow their construction to go on simultaneously, assigning to the better students the more difficult parts, to others those more simple.

Pattern-making with its kindred lines of practice, molding and casting, should occupy .20 of the entire time, or 280 hours. Actual casting is unnecessary, except so far as it stimulates the student. There is much that is human in a boy, and having worked out the details of a pattern first on paper, and afterwards in the shop, there is naturally a strong desire on his part to see the result of his labor in the casting. I therefore believe that no institution which carries its students through pattern-making can afford to lose the stimulating influence of a foundry.

Forging, which follows pattern-making, offers but little opportunity for work supplementing that of the shop. The most that we can do with advantage, is to follow, in a simple way, the iron in its course from the ore

to the merchant bar, and point out a few well-founded principles in forging, hardening, tempering, and annealing. From the necessities of the case, the demands upon the drawing room are equally unassuming, so that most of the allotted time for drawing can be devoted to such work as will give increased skill in the use of instruments. Carefully made drawings from copies will best effect this end, the subjects being architectural or mechanical, with a preference for the latter.

The shop work in forging should consist of a series of exercises which will bring out progressively, or with occasional repetitions, the underlying principles of the art. In iron forging, practice should be given in drawing, upsetting, bending, twisting, and in welding, under such a variety of circumstances as will best acquaint the student with usual methods of shaping and joining iron.

In steel forging, there should be practice in welding steel to steel, and steel to iron ; and in the formation and tempering of cutting tools for various uses, much attention must be given to the fire and to heating. Fire is the smith's indispensable helper, but to serve him well it must be well managed, for work that is carelessly heated can never be made satisfactory. Forging may extend through .21 of the whole time, that is 294 hours, or 147 hours of shop work.

Vise work in iron is the next branch. The supplementary instruction should discuss forms of cutting edges for metal as found in cold chisels and files, after the manner in which wood-working tools were discussed. The behavior of metals under their action should be considered. The student's knowledge of machine parts may here be enlarged by calling attention to the hand fitting that may be seen on given machines, and to methods employed to secure these fits. The mechanical drawing will also serve the latter purpose, if the subjects be suitable. Thus detailed drawings of machines may be copied, or what is better, I think, at this point, parts of actual machines taken as subjects.

The shop work should begin with rough chipping of castings by use of cold chisel and hammer, chipping to surface, spline chipping, and key seating, followed by practice in filing straight and curved surfaces to line. Then filing to fit and to finish may be undertaken, after which some practice should be given in scraping—a process by which most accurate surfaces are produced. (At this point a pair of flat surfaces delicately fitted by scraping were exhibited.)

Vise work in metal should occupy about .11 of the entire time, or 154 hours, 77 of which should be devoted to shop work.

Machine work in metals, the last branch of our course, should be taken up by the supplementary instruction, with the object of imparting to the student a thorough knowledge of the machines, of the cutting tools, and of their manipulation in doing work. After this, if he is not a candidate

for higher training in mechanical work, he should be given an elementary knowledge of the steam-engine and boiler. Different classes of engines should be illustrated and described, and their management explained. Sufficient thoroughness should be maintained to give the student an understanding of details which will enable him to sketch at any time the more common forms of valve mechanism ; he should also be able to calculate the power of an engine, either from an indicator card or by a dynamometer test. Boilers of common forms should be taken up in the same way so that he will not feel a stranger among the appurtenances of either engine or fire room.

The mechanical drawing of this period should afford practice with the brush in ink tinting, shading, blending of colors, and representation by color of engineering materials.

In the shop, machine work should begin by a series of investigations calculated to intimately acquaint the student with the mechanism of the machines. Taking a lathe, for example, the student determines the speed of the spindle corresponding to different positions of the driving belt, first by calculation, and afterward by actual count. He finds the ratio between the feed movement and the spindle movement, examines the construction of the machine, and makes a record of figures and facts from which a written report is presented. This done, work on the lathe may be commenced, the object of which, in brief, is to show the scope of the machine by giving the student practice in as wide a range of machine operations as the time will allow. To this end, I believe that in most cases the greatest good can be accomplished by the construction of simple machines or pieces of mechanism. Suppose each student be allowed to make a countershaft with its hangers and pulleys complete, or suppose several students unite their efforts in the construction of a more complicated machine, as an engine or lathe. The same arguments that were advanced in favor of constructing a complete thing in pattern-making apply to machine work. In the latter case, however, there is some difficulty. It has not as yet been successfully carried out, without the expenditure of some work upon the product outside of the student's work in class. That is, there is considerable work to be performed in the construction of a machine at all complicated, which, if done by the student, would amount to repetition and be unprofitable from an instructive point of view. It must, therefore, be done by the instructor or others employed for the purpose. This difficulty can be reduced, possibly it may be entirely overcome, by a judicious selection of the machine to be made. I doubt not that a course of machine practice can be devised, every stroke of which will be given to work of financial profit and still withstand criticism as a course of instruction; but it is certainly true that as yet there is in this country no such course. The time allotted to machine work is .28 of total, or 196 hours in the shop.

This completes my outline. A recapitulation of the course will show the total time to be divided into two equal parts, one of which represents the shop work, the other mechanical drawing and technical or supplementary instruction. Within certain limits of time as mentioned, the shop work includes bench work in wood, wood turning, pattern making, molding and casting, forging, vise work in iron, and machine work.

The mechanical drawing includes sketching from blackboard drawings; drawing to scale from blackboard drawing and from accurately made drawings; drawing to scale from data given; drawing from actual machines, flat tinting and ink shading.

The supplementary instruction relates to every branch of shop work, and at all times is closely associated with the drawing.

My reasons for selecting the subject as presented are as follows: The tendency of mechanical construction towards metal is too pronounced to be mistaken. Everything with which the engineer deals, that is made at all, *can* be made of metal, indeed is now made of metal, not in many cases to the exclusion of other materials, but with such success as to point to their practical exclusion in the near future. At all events, the world of knowledge will keep moving, and mechanical ingenuity, to keep pace with it, will continue to shape iron into new conveniences and comforts of life.

All this being true, it follows that the education of the mechanic of the future must center in iron. The constructor deals with the metal in two forms—cast and wrought. To reduce cast metals to forms that will suit his varied purposes, and to bound the possibilities of his art, he must understand pattern-making, and such an understanding depends on a knowledge of molding and casting. To *make* a pattern he must be able to use the lathe and bench tools. On the other hand, wrought metal forms must be handled at the forge.

In the *highest* order of mechanical construction the casting and the forging are simply in a state *preparatory* to the final or finishing processes, which may involve either hand work at the vise, or machine work, or both.

Thus our course, beginning with bench work and turning, advancing through pattern making, molding and casting, and ending in vise work and machine work, affords opportunities for study and practice in each of the several branches through which all machine construction must pass.

The paper was discussed by Prof. Ordway, Mr. Ham, Prof. Thompson, Dr. White, President Fairchilds, and others. Mr. Leipsiger, of the Hebrew Technical School, New York city, gave an interesting description of the work and progress of the institution with which he is connected. Dr. J. H. Smart spoke of the work that is being done at Purdue University. Later he urged that more attention be given to the industrial education of girls.

*Adjourned.*

# DEPARTMENT OF ART.

## *ART EDUCATION.*

THE ADDRESS OF OTTO FUCHS, PH. D., PRESIDENT OF THE DEPARTMENT.

*Ladies and Gentlemen :*

I CONGRATULATE this Department of Art Education upon the success which attended its first public exhibition as a Department of the National Educational Association, held at Madison, Wisconsin, last summer.

Although it was in no sense intended as a show exhibition for the gratification of the general public, the large number of visitors who daily thronged the halls expressed themselves well pleased with the numerous excellent specimens of the graphic art displayed there, and much credit is due to many of the exhibitors for the intelligent and systematic arrangement of their school work, illustrating the gradual development from the first rudimentary stages to the highest degree of perfection reached in their respective grades.

While there was much to be commended and admired in this exhibit as a whole, it must also be admitted that, viewed from an educational stand-point, it showed great weaknesses still existing in many places, where either the school authorities, or the drawing teachers, or both, have not yet realized the importance of treating the subject of drawing as an educational element. It was plainly noticeable in some instances that the whole effort and ambition was to make pictures, drawn and shaded in pencil, ink or charcoal and crayon, mostly from copies, and, with few exceptions, poorly executed. Too much cannot be said in condemnation of this useless practice, which, wherever it is suffered to continue, misrepresents the principles of drawing by making it simply an ornamental study, which should have no place in any of our public schools.

The interest manifested in the proceedings and discussions at the meetings of this Department, not only by the drawing teachers present, but also by many others, left no doubt but that the value of teaching drawing in the public schools is becoming more and more recognized by those who have given the subject intelligent and careful consideration ; but to make it thoroughly effective and of value as an educational feature, it

must be made a regular legitimate study. This means, 1st. The study of form and color from objects, teaching children to see correctly. 2d. Representation of objects by making constructive drawings of objects, a most excellent training of the mind. 3d. Ornamenting and decorating objects, exercising inventive skill and taste in design.

The practical significance of drawing from objects as an active agent to stimulate the perceptive faculties of children is no longer a matter of speculation; the fact is freely admitted by many of the foremost educators of this country, while it has long been accepted as self-evident in nearly all the schools of Europe.

Drawing is not a new feature in our schools; it has been practiced more or less, for many years; but, on account of the desultory and unsystematic manner in which it was conducted, amounted to nothing more than simply copying pictures, and was therefore justly regarded as merely an amusement and of no educational value whatever.

The system of drawing, however, which is advocated to-day, is an entirely different thing from that which masqueraded under that title in years gone by; and one of the chief duties of this Department is to explain properly the new method, use its influence in rooting out the useless stuff which still remains in many places, and induce the school authorities to substitute more thorough and systematic instruction.

I earnestly recommend to school boards and directors a careful examination of the report to this Department by a committee appointed to suggest a course of study in industrial drawing for public schools (page 345 to 361, in Journal of Proceedings of the National Educational Association, Session of the year 1884). There are few who doubt yet the efficacy of drawing as an educational element; but this is by no means all that can be said in its behalf. The pupils in our schools—at least the boys—should be taught the rudiments of an art which so many of them need to prepare them for the practical industrial occupations upon which they must depend later in life for their support, and that they may, by their skillful and intelligent workmanship, supply that aid toward the development of the manufacturing industries of this country which is needed to raise the standard of our manufactures, in order to successfully compete with foreign goods, and, above all, to hold their own in competition with imported skilled labor. I do not mean to imply by this that the public schools should be made practical training schools for mechanics and artisans—this cannot be; but what I do say, most emphatically, is, that the children in the public schools should receive instruction in those branches which are necessary to prepare them for any regular occupation that will furnish them the means of gaining an honest livelihood.

The public schools are for the children of the people, who should be trained to thrift and usefulness, and the fact must not be lost sight of that

the school education is not the end but certainly the means by which boys as well as girls are, to a great extent, directed and influenced in their choice of occupation.

Here, then, is the point where educators must act wisely in arranging a course of studies that is broad enough to meet the wants of all classes; it is not necessary to include the sciences, literature and arts in the curriculum of grammar schools, of which at best a smattering only could be given, which serves no purpose save to turn the heads of many children and make them discontented if they have to seek employment early, because their parents cannot afford them a professional education.

It is a lamentable fact that the tendency of our youths, in all classes of society, even the humblest, is to fall into that false and vain ambition to make their living in an easy way, enjoy the comforts and luxuries of life and contribute little or nothing to the productive force by which our industries must be sustained.

Now, let me ask, in all sincerity, are our public schools fulfilling their mission and directing their energies to educate the masses with a view of furnishing our manufacturing industries with intelligent and skillful workers? The training which the children receive in most of our primary, grammar and high schools is calculated to prepare them for commercial, professional, or literary pursuits, and next to nothing done to direct their minds to industrial occupations. What wonder, then, that the mercantile field is overrun with applicants for places. Crowds of boys, anxious to obtain a situation in some kind of an office or a store, are annually turned out of our schools, willing to serve for almost anything, whilst in the manufactories and shops, where skilled manual labor is required, the foreign element predominates; and it is especially noticeable that the higher the grade of skill required, the more we have to depend upon foreign talent to design and execute the work. I could cite innumerable instances to verify this statement. In the General Inspector's Office of Ironclad Steamers, a department in the Naval Construction Bureau during our late war, were employed some twenty-five draftsmen; of these, six were designers of machinery and vessels, the rest copyists. Of the former, four were Germans, one Scotch and one a Frenchman; and of the others more than two-thirds were foreigners of different nationalities. In one of the largest ship and engine-building establishments in Boston the head draftsman was a German; foreman pattern-maker, English; boss joiner, Nova Scotian; boss boiler-maker, Scotch; blacksmith, Nova Scotian, and nearly all the best mechanics in every department foreign born. The same condition, or nearly so, is found to exist in most all large manufactories throughout the United States where skilled labor is required, especially in furniture and piano factories, stained glass and architectural iron works, potteries, house-decorating, engraving and lithographic establishments, etc.

Now it behooves, above all others, those to whose hands is committed the education of our youths to shape the course of training so as to fit them for a broader field of usefulness and adapt the scheme of public school instruction to the many changes which our social state, as well as all our active industries, have suffered during the last thirty years. The whole character and methods of our manufactures have undergone such great changes, and their influence upon the community is such that other things must change according to the inevitable laws of compensation. The vast improvements in machinery, together with inventions and discoveries of new processes, have completely revolutionized every department of labor; even the farmer is turned into a half machinist or an engine-tender, and should know enough about his agricultural machinery to attend to the many little repairs and adjustments necessary to keep it in proper working order; in other words, he should be not only a farmer but also a mechanic. Although the demand for skilled labor is now greater than ever, yet it is a well-known fact that we have no regular system of training boys so that they may become skilled and efficient workmen in any industrial occupation. The apprentice system, formerly in vogue, is gone; hence the manual training and industrial drawing schools must be the agencies through which the future generation of mechanics and skilled artisans receive their elementary training. These are special schools, established for a special purpose, and stand between the public school and industrial pursuits as the business college does between the public school and commercial life.

It is a mistake to regard the Grammar School course wholly in the light of a preparation for the High School or College, and entirely ignore the claims which the great mass of the people have; to give their children the same advantages and preparation for the work-shop or designing-room that it gives to others who may enter an office, store, or counting-house. What reading, writing, and arithmetic are to the latter, drawing and modeling of and from objects are to the former.

It seems a little strange that such an important matter should be so lightly treated in this country, when our success in competition with foreign manufactures depends so largely upon the excellence of workmanship and originality in design. How can this be secured but by giving our attention to the proper training of our artisans? And this must be begun in early childhood, followed step by step in regular progressive order through all the grades of public schools. Unfortunately, boys are too often discouraged by their own foolish parents from cultivating a taste for industrial occupations; labor, once held honorable, has come to be regarded as degrading, and to make a living by your wits considered smartness; to borrow a dollar, invest it in some speculation and pocket the margin is called business; and he who knows best how to take advantage

of his fellow-men, amass a fortune while rendering no service to the world, enjoys the luxuries of life, and looks down disdainfully upon an honest working man. The fearful spread of dishonesty and corruption in business and in politics, to which we are daily witnesses, is the natural outgrowth of this diseased state in our body politic, and must be met by the strongest and most resolute combined efforts of school, church and home, in order to bring back that sturdy sense of honor, industrious habits and contempt for idleness, the corner stones upon which our forefathers raised their prosperity and success.

As I have said before, the school training is to thousands the guide which directs them in their choice of occupation ; upon it, therefore, rests the great responsibility of estimating the needs and providing that which is required to satisfy the same ; of course we all agree that reading, writing, and arithmetic are indispensable as the first elements in education, necessary in all walks of life, where even the slightest degree of intelligence is expected. What comes next in importance seems yet to be a debatable question with some ; with others, however, it has long ceased to be that, but has taken the form of a settled conviction. I say it is admitted, that reading, writing, and arithmetic are the first elements in education ; and why ? because they have the broadest application of all intellectual accomplishments; the subject, then, which comes next in importance is that which comes next in order on account of its efficacy as an educational agent; this undoubtedly is drawing, which, if properly conducted, trains the eye to see, the mind to conceive and hand to execute ; it likewise acts as a powerful aid and stimulant to other studies, because it is pre-eminently calculated to develop the perceptive faculties, and therefore is entitled to a higher rank than many other studies which only call the memory into activity. Is it necessary to call attention to the well-known fact, that every child's primer or first reading-book is as much, if not more, a picture than a reading-book ? Why is the picture of a cat placed beside the printed name ? It is because the illustration conveys to the mind of the child the meaning of the word. Take the illustrations out of Webster's *Dictionary*, and answer, whether the definitions of the names of concrete things would be as clearly understood without them. It is needless to state that there is hardly a scientific or technical treatise or text-book which is not extensively illustrated by drawings and diagrams, without which they could not possibly be understood.

Even in every-day life drawing and sketching is a most useful art ; how often things can be described and made perfectly clear by a simple sketch, where verbal explanations would completely fail. I may be pardoned for repeating here the often-told truism, that "drawing is a universal language," easier to understand than any other means of communication. This, together with its manifold application in the various industrial arts,

without pointing to its higher development as a fine art, seems to me is quite sufficient to refute the assertion, "that its scope is too narrow to entitle it to equal rank with other studies." Although in its utilitarian aspect this matter is of great importance, there is yet another reason why a love for art should be encouraged with fidelity. The intellectual development of nations is estimated by their achievements in science, literature and art. Every American feels justly proud of the bright stars which this country has already added to the firmament of science and of literature; but alas, poor Art, although of equal royal birth, is struggling like it were a stepchild, in the rear, almost afraid to assert its claims, lest it be rebuked for its presumptuousness and be denied that moral as well as material encouragement it must receive to make it thrive. A favorite excuse in extenuation of our deficiency in art has always been that this is a young country and has not had sufficient time to educate its people; but this excuse will not hold good forever; indeed, it is already quite threadbare, and soon will stand as a reproach for our indifference rather than a protecting shield to our deficiency, and as there is no royal road, not even to distinction in art, we might as well make up our minds that to win our way, we'll have to work for it. A good beginning has been made in some of our large cities, where a thorough system of art education has been introduced into the public schools and the rudiments of drawing are well taught, upon which follow Industrial Drawing Schools, and also in a few instances higher Art Institutions, and wherever these are established and properly conducted, excellent results have been obtained in furnishing the industries established there with draftsmen, designers, decorators and skilled artisans, bringing out also here and there artists, who, although they still find it necessary to finish their studies in the higher Art Schools of Europe, yet we can say, with some pride, that they received their first instruction in our schools.

It is doubtful whether our government can ever be induced to establish a National Art School of a high order, that would compare as favorably with European Art Schools as the first of our colleges and universities do with theirs; and since such institutions cannot be made self-supporting, the only hope remains, that some one or more of our wealthy merchant princes, who have sufficient appreciation and taste for art to invest large sums of money in private collections, come forward and donate the same, together with sufficient means to found a National Art School and Museum, that will do for this country what South Kensington has done for England, Paris for France, Dusseldorf and Munich for Germany, Rome and Florence for Italy. When this is done, then, and not until then, shall we cease "to hear of the necessity of importing skilled workmen for our art industries," and silence also the remaining few of our leaders in education, who for some unaccountable reason do all they can to check the progress

of this new feature in our educational system by flippantly giving it the cold shoulder or belittling its scope and character. It is an old experience, however, that all reforms must pass through periods of test and trial; the Christian faith was no exception to this rule. I am a strong believer in the doctrine of the survival of the fittest, and have not the slightest doubt of the ultimate triumph and higher development of true art in this country.

I earnestly entreat all members of this Department, as well as those who are not members, but who feel an interest in its work, to lend their aid in furthering the cause of Art Education, and hope that the proceedings and discussions at our meetings during this session may be made both interesting and instructive.

Having endeavored to point out briefly some of the reasons why drawing should be made one of the important studies in all grades of public schools, I now will add a few words concerning the manner in which it should be taught.

In the first place, the whole system must be as thoroughly and completely graded as any other study, the work in each grade exactly suited to the capacity of the pupils, models and objects used throughout, and no copying allowed except as practice in technique, and then only from good examples, prepared for that purpose; sufficient time must be given to the subject to do it justice, and none wasted in getting up show drawings for exhibition purposes. Let all the geometrical and instrumental drawings show neatness, accuracy, and thorough understanding; the free-hand work and designing, good taste and pure simplicity. Do not attempt too much in any grade; it is far better to review and go over the same ground twice than to reach ahead too far and get beyond the depth of pupils' understanding.

The next important point is, the training and preparation of teachers. In the primary and grammar grades the regular teachers must be qualified to teach drawing as well as other subjects; this brings us to the duty of the normal schools and leads to the inquiry whether the training which the students receive there qualifies them to teach drawing in the public schools, assuming that the course indicated above is the proper and accepted one.

In most normal schools are special teachers of drawing as there are also special teachers for other studies. Some normal schools receive their pupils from high schools, who are presumably well informed on all subjects they expect to teach, and take the normal course to learn the art of teaching, while other normal schools receive pupils who are not so well prepared, hence, must teach them first what, then how, to teach. If drawing in the public schools is ever to amount to anything, the start must be made here, and no one should be employed as special teacher of

drawing who does not fully understand the subject in all its bearings. It is not sufficient qualification for a Normal drawing teacher to be able to draw pictures and paint a little and then engage the students' time in drawing pretty pictures or painting little landscapes and flowers, generally copies, to ornament the halls for the exhibition at commencements ; they have no use for that in primary or grammar schools. This very practice begets the idea that a child must have inborn artistic talent in order to learn to draw, which is quite correct, if drawing pictures were the object aimed for. In order to prevent it from degenerating into an ornamental study, there should be in large cities, especially in manufacturing centers, a thoroughly competent supervisor who understands its artistic as well as industrial bearing, and whose duty is to lay out a course of work for all the grades, make frequent visits to the schools and see that the instruction is properly given, advise the teachers and instruct them where they need his help. In large cities this position is no sinecure, and it requires a man to fill it who is energetic, thoroughly interested, and systematic in his work. The schools should be supplied with such models and materials as are needed and the School Board have among its members a competent committee of experts, well qualified to judge intelligently whether the work is properly performed, who should also make it their business to visit the schools, not on exhibition days, but at any time during the term, to satisfy themselves that every duty is properly attended to.

The supervisor should also be the instructor at the Normal School, because the training given to the students there must be in perfect accord with the entire system as established in the lower grades.

To sum up briefly, the main points which constitute the substance and the purport of this study, so far as it relates to the public schools, I may say, that the entire course of the primary and grammar grades should serve as a preparation for the Industrial Drawing, Manual Training or Art School so that pupils leaving the grammar and entering any of the other three, are well grounded in the rudiments of drawing, that is to say: they should be able to make a neat and accurate free-hand sketch of any simple object, plant, or ornament and arrange a simple but graceful design upon a surface or a border, also to make an accurate geometrical drawing to scale, showing two or three views of any geometrical solid or simple object and understand the relation these views have to each other ; this would be at the same time the preparation they require for the High School course, and those who leave the grammar without entering any of the others will never have cause to regret the time they spent in the practice of drawing, for they will find it useful at some time or other.

In conclusion, I would ask all who can contribute facts and useful information bearing upon the subjects before us, to participate freely in the discussions for the benefit of all concerned, that it may result in a gen-

eral understanding of the best methods and furtherance of the cause of Art Education.

I thank you, ladies and gentlemen, for the distinguished honor you have conferred upon me by electing me to preside over your meetings during this session.

The regular business according to the programme adopted at the last meeting at Madison is now in order.

## *DRAWING IN PRIMARY AND GRAMMAR SCHOOLS.**

BY MRS. E. F. DIMMOCK, SUPERVISOR OF DRAWING IN CHICAGO SCHOOLS.

LET us hope the hands of the dial will soon record for the last time, the meeting of school officials to consider whether drawing shall be placed as a regular study in the school curriculum of any town or city in this broad land.

Our age of invention, science, and general progress is demanding the recognition of this branch of education as among the fundamentals.

With a rapidly increasing population new wants have arisen, new enterprises have been undertaken. From the once quiet valleys of the East and her peaceful streams, from across the vast prairies of the West, come welling to our ears the din and bustle of industries.

Villages are turned into noisy, bustling depots of trade and commerce. These pleasant though ominious sounds, attest the truth of the fact that the youth of to-day need more training of eye and fingers to supply skilled labor and complete the realizations of the brain.

Drawing is educational and should be pursued not only for the possibilities it offers for culture, but also for its intellectual discipline and sense training. It is in the line of enthusiasm for manual training, now attracting so much interest in our country, indeed it is its elementary essential and its vitality.

It is both a living language and a classical—classical in the lives of Holbein, Michel Angelo, Raphael—living in Messonier, Haydn, and may I not add our own inimitable Nast.

The watchmen on the hill-tops round about are alert to discern the signs of the times, hence, the question is constantly arising, How can drawing be taught successfully in the public schools? An important factor in education is the ability to read and express readily ideas through the happy combination of lines and angles; it is a language which should be common to all. To make it so the spoken and voiceless language must be taught hand in hand.

There is a practical side of drawing which touches the masses; is understood by very few, and forms the basis of the common industries. I refer to the ability to make and read diagrams delineating the facts of construction by geometric outlines.

* This paper was illustrated by drawings of the pupils of the Chicago schools.

This feature expresses in two or more drawings the three dimensions of objects; shows the structure together with the relation of the various parts of the objects.

A master builder, with simply a picture of the house he is to build, placed in his hands, would be quite at sea for the correct measurements wherewith to direct the various movements of the workmen, for appearances are illusive.

Plans, elevations and sections must be drawn and read before even the soil can be broken, or the stones hewed for the foundation; and what is true in regard to building, is also true in greater or less degree of all the mechanical pursuits.

(1) Drawing is a medium of expression. It is the language of form, silent but forceful. Form has its limitations both complex and simple—the simple limitations may be expressed by lines and angles. The complex limitations are expressed in chiaroscuro and color. Both are perceived through the sense of sight, both must be expressed to be seen, and, *vice versa*, both seen to be expressed.

(2) Drawing is an educational power. Sight-training quickens the perception, and leads to observation which is the "basis of all knowledge." Training the sense of touch by handling objects and by creating them in clay or other materials produces confidence and steadiness of nerve. Impressions thus gained are permanent, resulting in positive knowledge and deft handling. It disciplines the faculties of the mind, particularly the judgment, memory and imagination.

(3) The moral nature is stimulated by the cultivation of taste, and truthful expression of form.

To effect this development, children must be brought up on the wholesome diet of geometric solids. Taken early and in small doses, they are easily digested and form the bone and sinew of a symmetrical structure.

It is a kind of drawing for which amateur artists, and I might add the uneducated masses, have little fancy, dealing as it does with severe lines of uniform modulation. It is, however, eminently useful for all classes, and a knowledge of its conventions for expressing thought should be universal. At once begin with lessons on form; present objects to enlist the attention; encourage the child to observe them, handle them, and express the results of his observation.

The expression of his thought may be in four ways, viz., by vocal language, by shaping in clay, by laying with sticks, and by drawing. Ideas of edge, surface, direction, position, shape, become positive and fixed. Realize the plain form derived from the solids by cutting off faces with a thread held taut—for instance, the square prism cut laterally gives the tablet oblong; the cone the triangle, sphere and cylinder the circle.

Model familiar objects based upon these forms, thus emphasizing knowledge acquired and leading to closer observation.

Through handling, children come to know the solids as wholes and in parts. They must draw them as seen at an indefinite distance, *i.e.*, giving facts of form; also at definite distance, *i.e.*, giving appearance as affected by position, as, for instance, in position above and below them; to the left and to the right of them; singly and in groups.

There can be but one result of all this; a knowledge of those underlying principles that are necessary to success both in the atelier and the work-shop.

Secure the realization of form in the concrete by putting scissors into the class-room, continuing the hand training so well begun with the clay. Cutting forms in both paper and wood is one of the best correctives that the teacher can bring to her aid; it secures greater accuracy, multiplies execution and trebles the rapidity of the drawing.

Constant and continued attention must be given to forming good habits of position, of body and books, pencil-holding, and arm movement.

As a result of this varied drill, will come trooping in familiar objects, at first simple in outline, then those presenting more complex features, all standing out bold and clear from the flat surface, testifying to trained eyes, freedom of execution, independence of expression, and comprehension of sound principles.

One of the charms of outline drawing is the spirit of freedom and abandon which may characterize the whole course of study. This is only accomplished when eyes and hands work together, tools are used properly, and when teaching of principles has come to be paramount to immediate results. Put the body, mind, hand, tools and medium of work in proper relations as regards position and doing, and the results will take care of themselves. There must be no higgling over lines with pencil or rubber. A determination "to fight it out on this line" with free-hand movement must be made from the start; not only in the drawing of long lines continuously, but in all the varied work, from the first pencil holding in the baby class to the well-informed graduates of the highest grades. To require perfection at every step is to stultify the enthusiasm and destroy confidence. Better that lines bulge, tremble, or lean from one side to the other, than that this freedom be destroyed or go uncultivated altogether by the use of the straight edge. This, with other mechanical aids to perfection, are not to be ignored; they have their rightful place and legitimate use. Such aids, however, should follow, not lead in the process of development.

For only in youth while the muscles are supple and the consciousness not impaired by self-distrust and failure, can be acquired the readiest facility and confidence in doing.

There is, however, an undercurrent of feeling constantly coming to the surface in favor of shading, coloring, and copying pretty pictures. It is argued that the children take great delight and interest in such work, and make wonderful proficiency. Yes, in what? in becoming mere machines.

This notion of pleasure comes from the stand-point of maturity, not childhood; children are pleased with simple toys.

I have seen sixty little people manifest more real, intense earnestness over drawing the faces of the cube, held in different positions, than in copying the one face of a cat.

No one thinks of giving the young, problems in interest to compute until after the fundamental principles have been mastered. Is it not a universal criticism on the American artist of to-day that his drawing is bad.

Time spent in teaching in this mechanical way is wasted; the results obtained are worthless, being at best but wooden bits of coloring. No principles are inculcated, no originality inspired, and no mental activity awakened.

It may require some pluck on the part of the teacher to shut his ears to these clamors, and draw his inspiration for the work from the simple geometric solids, but once familiar with the possibilities they offer for instruction, interest in them never flags.

## *DRAWING IN HIGH SCHOOLS.*

BY WALTER S. PERRY, SUPERVISOR OF DRAWING, WORCESTER, MASS.

THREE years ago, in this hall, there was held the first exhibition of drawings in connection with the meetings of this Association. The attendance was small; although the exhibit at that time was larger than at the present, yet it is doubtful if, in the four days of the Association, there were as many visitors as there were during one hour last evening. But that occasion was one of great profit to us. We went away feeling that we knew in some measure what each one was doing, and that improvements would certainly follow in our own work. We came again the next year, and a few more were in attendance upon what was then the first recognized meeting of this department of the Association. There was appointed, at that time, a committee to report at the next regular meeting upon a course of study in drawing for primary, grammar and high schools. For several days last summer, at Madison, where we had probably the largest exhibition of drawings ever held in the United States, we discussed that report, the result of much thought, labor and correspondence. The report, as amended, was adopted, and we realized that, for the first time in the history of drawing, we had a basis upon which to work—a basis which would be recognized at once by all teachers; a course of study which, in its entirety, represents, in successive stages of development, the various educational features of the subject.

But, in all these meetings, it has been primary and grammar school work which has received the full measure of discussion, almost to the exclusion, except in the above-mentioned report, of high school work. It was necessary that this should be so, for without the drawing in these schools well developed, that of the high school could amount to but little. We come now, perhaps for the first time, to discuss drawing in the character of its bearing upon the average high school of the country, and the full scope of its possibilities.

### NATURE OF HIGH SCHOOL WORK.

Were I to trace its history, it would be individual in character, for, until within the past two or three years, where were there two teachers in the country who were pursuing essentially the same plan or line of work—certainly not to the knowledge of each other. There was a time when,

possibly, we taught more theory than practice—the method in which drawing was ushered into the schools. We have not forgotten the time when we felt that we were in duty bound to introduce instrumental perspective and orthographic projection, and spend a half-year or a year upon most abstract theoretical delineations. We have learned that pupils must deal with the concrete, with the solid form, or they cannot reason in regard to the correctness of their work.

In the acceptance of the report of the committee of last year, we decided that all our work must be divided into three divisions, which at once are seen to be the educational divisions of a study having for its primary object the study, delineation, and ornamentation of form. These divisions are : construction, relating to the facts of form ; representation, relating to the appearance of form ; and decoration, relating to the decoration of form. Therefore, whatever our work, it must include these three subjects, and it is for us to decide just what the development of each shall be in detail.

## Text-Books.

Shall we use text-books in the high school ? My own answer is, No ; but this answer comes only after a long trial with and without books. I do not believe the high school is the place for drawing books. We want the freest work it is possible to secure, and we cannot get freedom by the use of books in the high school. In the lower grades of schools it is different. We can more easily influence young children to work with freedom in their drawing. They will do much as we wish them, but the pupils of a more advanced age are not so receptive of our influence. They are adverse to working with dash and freedom, for fear they will spoil the effect of the whole. They are continually looking back at the few preceding pages, and in their fickleness are afraid that the work of the day will spoil that of yesterday. Indeed, we wish to teach pupils to be careful, but not to the detriment of all else. We should teach the pupil that paper is cheap, to the extent that we better sacrifice paper than the pupil's freedom of touch ; that the paper is for the pupil, and not the pupil for the paper. He should be taught that drawing does not mean extreme finish from finger ends, with body bent, and eyes in close proximity to the work. But rather with body erect and arm free, he is to draw that form, which in its sense perception originates in the brain, flows down through the muscles of the arm, which in its execution is guided by the eye, now free, from its position, to do true service. Moreover, if the work of the high school is of that character, from such objects and groups of objects as the course referred to indicates, then it can only be properly executed on large sheets of paper, in a room set apart for drawing alone, and properly arranged for the admittance of light.

### Drawing-Room and Models.

We must have a drawing-room, as has just been said, properly arranged for the admittance of light, and we must have models—models in wood and models in iron, and, if possible, models in plaster. But it is often said, "Our committee will not provide these things." Don't argue the matter further with the committee, but convince them through the pupils, —through their own work. We have in our high school enough objects in iron, such as bearings, valves, a lathe, etc., to supply the largest classes, but the committee never expended more than five dollars on this particular class of models. Go to the machine shops, or, if there are none, to those shops where much machinery is used, and there will be found odd pieces of castings, which have become useless, perhaps, as parts of improved machinery, but which, when covered with a coat of paint, will make good models for drawing if the construction is not bad. If possible we must secure those objects which are complete in themselves, for pupils always draw with more interest if the objects are such that they can see their practical value, and understand just how the various pieces go together to perform allotted parts of some great whole. If there are no machine shops, there must be hardware stores, where wrenches, vises, and many objects can be obtained at small cost. A monkey-wrench is one of the best of models, while there are various patterns of vises, some of the simplest in construction serving as excellent models. Better spend a little money, if need be, on our own account; we shall reap more by and by. I have always found that the owners of machine-shops are willing to help in this matter, often giving and loaning objects for the use of the schools. They see at once one practical feature of drawing when it deals with the real objects of common use and construction. A set of geometric solids for free-hand work should be obtained if possible, and boxes, books, and various common objects can be added to increase the meagre supply. Pupils will often contribute a box, a block of wood of some pattern they chance to find, and if all are asked to bring some one thing, the variety obtained is surprising, while fruits and vegetables make the best of objects for light and shade.

Have drawings made of these objects, and as fast as made hang them on the walls of the room, or make selections for the purpose, and these constant reminders of the practical and valuable work that has been done and is being done, will arouse the pupils, their parents, and members of the committee. Mechanical drawings of a few machine models, or light and shade drawings of simple objects, or designs and decorative drawings made by pupils, will appeal at once to the eye of the committee-man, and affect his vote more than anything else. He sees what has been done, and realizes for the first time the full scope of the work, and with these visible things there will be but little trouble about models.

We have, stretched across the four walls of the drawing-room, horizontal cords, upon which the best drawings are hung as fast as completed, and they serve to help along the work very much in the way mentioned. This arrangement often saves much talking, for reference can be made to these drawings to illustrate errors or points of excellence.

### Shall the Study in the High School be Elective?

This is one of the questions I shall expect you to discuss. My own answer is this: that it depends upon circumstances; the size of the city, the amount of assistance, the condition of drawing in the primary and grammar schools, the time that the teacher of drawing can give to the schools, and many other minor matters. Allow me to refer to my own work in further explanation of my meaning. Worcester is a city of nearly 70,000 inhabitants, with over 600 pupils in the high school. When I went there, drawing was made an elective study in the high school for these reasons. It seemed desirable to give all the time possible to the primary and grammar schools, for without this work fully developed, that of the high school could amount to but little. In order to know how to develop this work in the lower grades, it was necessary to give lessons myself day after day. Of course the teachers did the greater part of the teaching; but it is impossible for any teacher of drawing to teach understandingly by simply instructing the teachers. No one can tell what the children may be expected to do without constantly being with and instructing them, and no progressive teacher can afford to entirely give up for one year, or part of the year, this association with the children in actual school work. It was necessary, then, to give the greater part of my time to the schools below the high; and the work in the latter, if obligatory, must be with very large classes, and consequently of that character which would admit of no educational development, or beget interest on the part of the pupils. It seemed better, therefore, to do the best work possible in the primary and grammar schools, and insure small classes in the high school, at first, by making the work elective, and thus secure an opportunity by which the drawing could be placed on a proper basis, and a complete course formulated. By doing this, pupils who so elected began the work, and carried it to such a point as to create great interest on the part of other pupils, until from a class of seventy-five pupils, six years ago, there has grown a class of two hundred and seventy-five. With the whole school at first, it would have been impossible to show the possibilities to which the drawing could be carried by pupils in the high school. Pupils, seeing what others have done, can be more easily taught to do such work themselves, and consequently much larger classes can now be handled than formerly, and at the same time a steady advance can be shown in the nature of the work.

This plan of making the work elective is to be advocated only in those large places, where there can, by voice of the committee, be but one teacher to do all the teaching in the high school, and to supervise all of the other schools. In small places, and in large cities if a second teacher could be employed, it would be better, by far, to make it obligatory, for it stands to reason, that when it is optional with the pupil, much practical work cannot be enforced without driving some pupils away. Moreover, many of those who do not take it are among the very ones who most need it.

We come now to another question which is, "Shall we allow the pupils to choose between the work of the lower line of the exhibit, that of mechanical and architectural drawing, and the combined work of the other two divisions, which we may call free-hand." In my own case and conditions of study of pupils, my answer is, Yes, for up to this time the pupils have had eight years, at least, of free-hand work in each of the three divisions of the subject, and it seems that upon their entrance to the high school, the boys should, if they so desire, take the course in mechanical and architectural drawing, and carry it to the fullest development it is possible in the high school; the same with the representative and decorative work. Should, however, a pupil desire to take the two kinds of drawing, he ought to take one for a whole or half year, and then the other, for the work at this stage is of such an advanced character, that several lessons may be required on one model, or object, or group of objects.

## Exhibit of Drawings.

It was the understanding with each one who was requested to read a paper at this meeting, that he should bring an exhibit of drawings to illustrate the paper presented. I must, therefore, in the further presentation of this subject, refer to the drawings upon the wall, which were executed by the pupils of the Worcester High School during the past year. You will observe that the drawings are arranged in three parallel lines, the lower containing drawings relating to Construction, the middle to Representation, and the upper to Decoration.

The time given to drawing averages one and a half hours per week, and the course of study for the three years is as follows:

| | 1st year. | 2d year. | 3d year. |
|---|---|---|---|
| Decoration. | | **HARMONY OF COLOR.**<br>Historic Ornament.<br>Original Design: { Geometric Units and Plant Form. | **HARMONY OF COLOR.**<br>Original Design: { Plant Form from Nature. |
| Representation. | **LIGHT AND SHADE.—Crayon.**<br>From Models.<br>" Objects.<br>" Plaster Casts. | **LIGHT AND SHADE.—Color.**<br>Plant Form from Copy.<br>Plant Form from Nature. | **LIGHT AND SHADE.—Harmony of Color.**<br>Plant Form from Nature.<br>Fruits, Vegetables and Groups of Colored Objects, with background. |
| Construction. | **WORKING DRAWINGS.**<br>From Models in Woods.<br>" Castings of Bearings, etc. | **WORKING DRAWINGS.**<br>From Valves and Machine Details.<br>Development of Surfaces for Pattern Making. | **ARCHITECTURAL AND MACHINE DRAWING.**<br>Building Construction and Original Plans for Houses.<br>Free-hand Sketches and Working Drawings of Machinery. |

While this exhibit gives a general idea of the present work in drawing in the Worcester High School, it does not show what it is intended the study shall be a few years hence, when the pupils who began drawing in the primary schools shall have completed the high school course. While advance is made in those practical features which have received the most attention, it is hoped that the two divisions of representative and decorative drawing may be so broadened as to include such a study of historical ornament, in the flat and round, as to place drawing in its proper rank with the highest culture studies of the high school.

At this point the whole exhibit was explained, the explanation entering into the many details in regard to paper, materials, manner of execution, etc., and many hints were given upon methods to be pursued in teaching the different subjects.

## DRAWING IN NORMAL SCHOOLS.

BY MISS KATE E. SHATTUCK, ST. LOUIS, MO.

As drawing is beginning to occupy an important place in the education of the children and youth of the present day, the question of its presentation and application in the normal school becomes a serious one.

The normal school is the supply office for teachers in the public schools; this requires a preparation on their part, and involves a moral responsibility on the part of those who direct the work, demanding, also, the honest endeavor and best thought of thinking people.

Although the work is yet in its infancy, we may be very grateful for the spirit of investigation, both good and charitable, that is now going forward; willing to take the best, wherever found; having courage to break away from custom, where custom has proved itself irrational and wrong; using the natural means and God-given common sense vouchsafed to man. Success is sure to those who are working in this spirit and have the patience to wait for results.

Compare the broader life and larger liberty of the work of to-day with that of some years ago, and be happy for the new direction and impetus drawing has received. The only teaching in this subject that could be then furnished in high school or private academy was the copying of landscapes in pencil, or a copy of a print in water-color, without even a suggestion that there might be an idea connected with it, or that there was in it anything to develop the faculties of a mind. To those who taught, this was high art, and the poor pupils, blindly following, were denied the life which rightfully belonged to them.

To-day we find that drawing is only one of the many subjects that aid in developing the child mind and arousing his intelligence—thus becoming a necessary part of his education. His intellectual growth depends not upon the knowledge of facts he gains, but upon those mental processes which result from observation, perception, conception and expression, thus exercising the mind in a natural and rational way. In the study of form this process of development is clearly seen. The child becomes acquainted with the object by observation. Unconsciously he recognizes the great power, force, which has been at work within or without, and by a systematic process has produced a result. The child's creative faculty is stimulated, and from his inner consciousness, recognition first by his intelligence, is evolved the power of making. Whatever materials are used,

whether clay, wood, or paper, the two processes, mental and physical, go hand in hand, and successive steps bring about a result. If he has an idea, the manipulation of the material is but a servant in the hand of a master.

Notice the steps a child takes in his attempt to create form. A sphere is placed before him and he is required to make one from a bit of clay. He looks at it, takes it in his hand, and finds it is like a ball; he knows a ball can roll, and that is what his ball must be made to do. With bright eyes and eager manner he takes the clay, rolls it between his hands, and after a little patient working produces a ball that will roll. Any one who has seen a class of fifty or sixty children obtain a similar result need no further argument to prove the fact that the creative side of the child is stimulated, the intelligence awakened, and a corresponding amount of interest and pleasure generated.

He has now become experimentally acquainted with the genesis of all form—the sphere—its action and characteristics, as shape and surface. The cube is next placed before him, as the next step in the production of form. Observing and handling the cube he finds that it does not roll and looks for the reason. He discovers a new surface which appears flat, and the uniting of these surfaces produce edges which prevent the ball from rolling; he does notice that it can stand and slide. Beginning with the sphere, by flattening opposite sides, the primary form of the cube is evolved, and by repeated and similar steps plane surfaces are obtained and the cube complete. From the sphere again he evolves the cylinder, and from that the square prism; again, from the sphere the cone, and from the cone the square pyramid. From these geometrical solids he passes to the modified forms, and finds an added interest in developing various fruits from the sphere and various articles of furniture from the cube.

This process of evolution not only develops the mind educationally and systematically, but furnishes food for the creative energy and gives the enjoyment which proceeds from intelligent, well-directed efforts. The starting-point is himself, and not from some abstract truth distant many miles from his spiritual sight. He may reach the abstract truth by ever-widening circles, and when he does, it has become a part of his very life, because it is not a graft, but a growth.

From the making of the object he takes a step which carries him farther from the starting-point, by representing the object as a picture—by these processes he has reached a principle which he can formulate from what he has learned, and language now means much to him, which if given him as a principle to start with would have been but as sounding brass or tinkling cymbal.

Recognizing the fact that the harmonious development of the child mind is of more importance than the accumulation of facts, the work of the normal school in the preparation of teachers calls for wise and judi-

cious management. Methods may vary, but if the spirit of the teacher is life-giving—and truth-seeking—the labor is not fruitless but will bring its deserved reward.

In the normal school there is a fourfold work to be done. The students should have first, a broad comprehension of the subject; second, a knowledge of the principles to be taught; third, technical skill in manipulation; and fourth, the power of impárting the knowledge to others.

First. A broad comprehension of the subject involves much; (a), influence on the mind educationally; (b), its relation to various branches taught; (c), personal habits it engenders; (d), its practical value in the world.

(a). Its influence on the mind educationally. Just as the boy in making his first sphere makes the starting-point himself, so the young student at the normal, in treating this subject, must begin from within, and find out the thoughts that are there, make his own observations, and arrive at conclusions from thoughtful, reflective convictions. She is there for a purpose, and that purpose is to prepare herself for teaching. What shall be the object of her teaching? Is the mind to be mere receptacle for book knowledge only, or will she seek for the moral, mental, and physical development of the child? If the development of the child is the object, how is this development obtained? For instance, what and how are the faculties of the mind to be trained to aid mental development? She discovers that attention, observation, perception, and expression are faculties by which the soul is cognizant of its environment, hence universal and important elements in the soul's furnishing. Then arises the question, What are the means of expression? It is obvious that the most complete expression is that of making; drawing, or representing follows; then language, which is descriptive. She has thus proved to herself, beyond a doubt, that drawing has an educational value of its own.

(b). Its relation to various branches taught. If we but glance over the programme of school studies, we find drawing as an illustrative power, and one which can be almost universally used, making the subject much more simple and more easily comprehended.

(c). Personal habits. We know that habit is a power, and a good habit is a value to its possessor. The cleanliness required of paper in drawing creates a tendency in the pupils to acquire habits of neatness, and the ability to put on paper at once an expression of their knowledge teaches prompt and accurate action.

(d). Its practical value. The success of the various industries, as manufacture, building, machinery, depends upon the skilled labor of the draftsman, thus proving that drawing has a most important commercial value in the sustenance of mankind.

Having recognized the fact of its educational and practical value, then it belongs to the masses; for whatever is educational and practical in its

tendency is a benefit to mankind, and demands a place in the curriculum of school studies. Demands it not as an officious intruder, but as a right, as a precious privilege in aiding to lift humanity toward a richer, broader, more complete life. Anything which does not do this is barefaced pretension, and has no place in the education of immortal souls.

Second. The fundamental and accepted laws, which are the primal elements in the system of drawing, and by the knowledge of which a successful result is obtained, is an important part of the work. These principles may be represented in a division of the subject, which groups under construction the principles which relate to the making of the object and development of surface, which groups under representation the principles which relate to the appearance of the object, which groups under decoration the principles which relate to the beautifying of the object. Under this division all the principles may be distinctly graded.

Third. Coming now to the third division, that of technical skill, we find there should be a distinction between a principle or an idea, and its technical execution. Training pupils to perceive principles is a distinct feature in normal work. Training pupils to give proper expression to that idea is quite a different matter, and hence in the normal instruction it is important that the knowledge of principles should not be buried in instruction that should relate to skilled manipulation or *vice versa*. This distinction is so important to be kept in mind in normal work, that in the diagram we have endeavored to set forth under technical skill, what is involved in the strict use of the term, learning to draw.

We come now to a fourth division, the development of the teaching power. Teaching is a science as well as an art, and although one may have been graduated at the best art schools, with an ability to draw remarkably well, this of itself is not sufficient.

It appears to be only one-fourth of the complete requirement. We do not underrate the knowledge, for one might study during life and then not possess any too much knowledge with which to begin elementary teaching, but unless there is a power by which the teachers can evoke responsive and intelligent outcome from the pupils, all his understanding of the subject is of little use. Teaching power comes permanently from the teacher, having a clear and comprehensive idea of what she wants to accomplish, and an understanding of the manner in which thought is evolved, sufficiently to fit the instruction to a rational means of mental development. A teacher who is alive, interested in his work, has tact and ingenuity, even though the methods may not be the best, must succeed in getting something from the pupils. However, it must be conceded that the method whereby the pupils do the work themselves, under the direction of the teacher, is preferable to the one where the teacher does all the work, and the pupils are passive recipients.

Go with me to a school-room where the sudents are having their first lesson in representing rectangular objects, and note the method of work where it is the result of the thought of the pupils. Each of the students are provided with an oblong piece of paper 3 x 12 inches. Each folds the paper in the form of a cube, and places the cube on the back of the upper surface of desk, one face directly in front. The object is, that each one shall make a drawing of his own cube just as he sees it, but it shall be done intelligently, and the work shall be his own. By holding a pencil coinciding with the sides of the front face of the cube, each finds that the sides are vertical and horizontal, forming a square. They are next directed to use the pencils, and notice the direction of the sides of the upper surface of cube. They find the pencils oblique in position, and that, if long enough, they would meet. The question where would they meet, is answered by one who discovers it would be at the level of the eye. The various steps are thus taken until the analysis is completed, and they have learned to draw the cube as it appears, not from what the teacher has told them, but by a judicious questioning, and the power to think and see for themselves. Now they are ready to formulate the principle they have deduced from experimental knowledge ; " that parallel lines retreating from the eye appear to converge," is a fact that they have proved, and mean much more to them than if the teacher had given it first as an abstract principle.

In the future when drawing shall have become more general, and children draw as easily as they read, then they will be ready for the normal training which properly follows after certain knowledge has been gained. Not till then can we look for the most effectual work in this Department.

In the meantime, efforts must be made to make the work reach as high a plane as possible, and in what direction should these efforts be found ?

The manner of presentation should be of such a nature that the subject taught shall be not as a dead language, but as the living word. If the work is to be a mere pretty accomplisment, with the purpose only to copy a picture in a helpless way, what is this but a dead language. It has the semblance of life, but vitality is not there. If instead a course has been pursued whereby the mind has grasped principles, and is ready to adopt the knowledge gained to the subjects in hand whether drawing from a group of objects or sketching from a bit of nature, then how different the whole character of the work. In the second place the mind is alert and active, because it has first been necessary for the mind to see and understand before the hand could do its bidding. This is living work and as different from the other, as light from darkness, because in the latter the work has received the impression of a thought.

Glancing now at the course suggested on the chart, we find the work systematically and progressively laid out. Construction, which is the

foundation of the superstructure, is taught by making objects. This branch of it prepares for representation, which can only be properly taken up after being familiar with the construction of the object. Decoration, is the third division which ministers to our love of the beautiful, and cultivates the taste. From the wee child in the kindergarten making its first sphere, to the most difficult work in the university, the constructive principles are the same. In representation the same principles which enable the twelve-year-old girl to make an intelligent sketch of a group of models give the power to the artist in his successful picture.

In decoration, the elements from which the boy works out his design when expressed by the best thoughts of the past, have given us architecture. These branches of this, our great subject, give us the foundation of all beautiful work, for its basis is truth, and whatever is true is beautiful. Does this order interfere with the true artistic expression? By no means; only the true is artistic, the false a sham and show.

In the City Normal of St. Louis, the attempt is being made in the direction of systematic practical work. As yet faulty and incomplete, we may hope the failures of to-day may be the success of to-morrow, and by realizing what we have not done, see what we may do.

The time given to the subject averages two hours and twenty minutes a week, in school hours, with an additional hour for home work. The pupils begin with construction, as this gives them an opportunity to really know the object, and also gives some skill in handling. The simple solids, as the cube, cone, cylinder, are studied, first single, then in combination. Each solid is required to be made at home, which necessitates the knowledge of development of surface. The drawing of the object is given as class-work, following the analysis. The sketch is made without use of rubber, corrected by pencil, erasers used and the drawing lined in. From the simple solid, they pass to the construction of common objects, thence to use of instruments. Beginning with a few practical problems, they make their application, followed by sections and intersections.

In representation, the steps are gradual and progressive. From the drawing of the single solid in the least difficult position, they pass to the combinations in simple groupings, occasionally introducing a familiar object. Then as principles become mastered, composition in a very elementary way is attempted, and the pupil's ingenuity and taste are brought into play in trying to make pleasing combinations and tell a short story.

Decoration begins with a simple repetition of units about a center, followed by a modification of units. A geometric triangular form is chosen, and the unit based upon this. One modification leads to another, and in the end an entirely new figure is evolved. The study of historic ornament now becomes valuable, for it gives him a knowledge of good curves, and pleasing combinations. Where he has so made these lines of

beauty a part of himself, then the spirit will be apparent in the design which follows.

History and geometry have thus far furnished material, but there is another source open to him full of beauty, and that is nature. A vast realm of undiscovered country is before him, but at present he can only use the little, for his vision is yet limited. Plant growth affords him ideas which lead him higher in the realm of ornament, and he is thus introduced to that which has been such a mighty power in all good decorated conventionalism. As before he used abstract lines and curves to form his unit, now he studies the leaf of a plant and forms a unit based upon the curves of the leaf, then follows a unit made up of different views of the conventional leaves or spray of leaves. Each step is additional, and leads from one thought to another.

In clay the simple solids and modified forms of nature are taken up, followed by a few lessons in high relief, enlarged or diminished from a cast. This prepares for the modeling of plant forms from nature, preparatory to conventionalism and design. The senior and advanced pupils are required to teach five weeks in the district school, under the direction of the teachers of the several rooms, which proves of invaluable help. Another aid would be found for the advanced class by taking a set of drawing-books, noting the points of difficulty, and methods of presentation.

Finally, truth is such an essential element in all teaching as well as learning, that the moral qualification of the teacher, of all others, needs no word to prove its necessity. A firm, unshaken purpose, and high moral courage to act the true at all times, which means not a narrow contraction of one's own ideas, but a broad large-heartedness which shall rid itself of personal prejudice, and in its wide range of vision, be willing to recognize the truth, even if that truth condemns the dearest theory that has been nourished.

With consecration and enthusiasm, a true purpose, a knowledge of the work and power of imparting it, a determined persistence and patience in waiting, the teacher may go forth to the work fully equipped to meet the duties of his position and conquer.

## *INDUSTRIAL DRAWING FOR PRIMARY AND GRAMMAR SCHOOLS.*

BY CHAS. M. CARTER, OF THE MASSACHUSETTS NORMAL ART SCHOOL.

Mr. Carter described the method employed in teaching the above under direction of the Massachusetts Board of Education at the Massachusetts Normal Art School, the Normal Schools, and at State Teachers' Institutes. The paper was illustrated by drawings and objects made by the children in the schools of Quincy, Mass.

Mr. Carter found at the beginning of his labors that he could not follow or specially recommend any special system embodied in the text-books. He was, therefore, obliged to develop or formulate a system of his own. To this end he commenced a study of the whole matter, and noted what he considered to be the best method of presenting any subject to children. In this study his attention was strongly called to the great value of the objective method of teaching. He found that the methods of instructing in drawing in vogue consisted almost entirely of flat copying, which resulted in the pupil's reproducing, oftentimes blindly, the results of the observation of others. Noting this, and feeling its inadequacy to meet the real educational want in this direction, he developed, step by step, an objective method of presenting drawing. By this method the subject is really presented as a study of form, pupils being led to gain knowledge by observation, using eye and hand to that end. Afterward they are led to express what they know or have acquired by means of drawing, molding in clay and language, clay being used to express ideas of objects as wholes, or in their entirety. All drawings that are made are either working views or perspective views, the working views being made either freehand or by means of instruments, using geometrical problems. As pupils gain knowledge, they are led, from time to time, to continue it in new forms

BY MEANS OF INVENTION

or design, these exercises being based upon the principles of symmetry, repetitions, alternations and balance. The pupils receive suggestions in making arrangements for their work by placing sticks, splints and pegs, as representative lines. Afterward they arrange, in a similar way, geometric forms cut from paper. Further along they derive suggestions from variations of geometric forms. These lead to the use of the plant form, which they are taught to conventionalize and adapt to the rules of design. Sub-

sequently they are taught to combine details of historic ornaments, thus making designs in various styles, such as the Egyptian, Greek, Byzantine, etc. It will be noted that in this general outline of the method there are three main parts: (1) Gaining knowledge of form by observation; (2) afterward expressing it, and (3) combining it into new forms by invention or design. It will be seen, therefore, that the method is purely objective.

Starting with this general outline, it may be said that the work is arranged, in each of the eight grades, into which the system is divided for the purposes of instruction, under the three headings: observation, expression, invention or design. Realizing that all forms about us are based on geometric forms, the pupils commence in the lowest primary grades to learn what the general forms of bodies are, such as spherical, cubical, and cylindrical bodies. Other simple bodies, such as the square and triangular prisms, are taught as far as the time devoted to object teaching will allow. Having learned what these bodies are, the pupils are led to express what they know by means of plastic clay. Observation and power of expression are further developed by molding simple objects based on them, as an apple, stick of candy, dice, etc. From the objects first used are taught the common qualities of form—that is, plain and curved *surface,* straight and curved *line,* and *point.*

After These Have Been Taught,

they commence teaching and representing the details of these qualities from objects. As a result, geometric features form an important part of the primary school work. After each feature is taught, various exercises based upon it are given. For instance, if a circle has been taught, various exercises combining its use are given. Some exercises are in dictation drawing, others in memory drawing, and, most important of all, still other exercises are in drawing from objects containing circular curves. These drawings are made so as to express the facts which are required in working views of objects, and at times pupils make from these drawings the objects in paper, wood, or other material.

The first inventive exercise in the primary schools consists in arranging sticks of definite length, and colored,—the primary and secondary colors. These represent lines with which the pupils are familiar. Under direction of the teacher, they place them so as to represent examples of symmetry, repetitions and alternations. By using these sticks, pupils gain additional knowledge of color and of exact lengths, the sticks being from one to five inches long. Subsequently, colored papers in geometric forms are used in the same way. Further along the pupils are taught to vary these forms by means of cutting. In the highest grade of the primary schools, leaves and flowers are used.

What has been done in the grammar schools of Quincy is the work of

about three and a half years, and if the scope and extent of that work could be adequately understood and appreciated, it would be seen to be a most wonderful and encouraging one.

### In the Grammar School Grades,

the pupils make both single and combined working views of various objects, the kind of drawing being that really employed by artisans in making plans and elevations. As far as possible these exercises are arranged to be like those of practical life. For instance, the teacher presents such an object as a footstool. She asks the class how many views are necessary in order to show all dimensions. She then asks the pupils to make quick sketches of those views, after which different pupils measure the object, giving the dimensions to the rest of the class, who place them quickly on their sketches. Having gained all the dimensions, the pupils are given pieces of paper on which they make full size or scale drawings of the object, using rulers and compasses. In some instances pupils have become so much interested in the work that they have been quite willing to attempt making the object from their drawings. The exhibit at Quincy showed an unusual amount of that kind of work. The granite industry being prominent in that town, pupils in the higher grades have been required to visit the stone yards and get the dimensions of monuments, which they have afterward reproduced by scale drawings. It is the intention, ultimately, to have drawing boards, T squares, etc., used in the highest grammar school grade.

In conjunction with the exercises described, a graded course in free-hand perspective is developed. Design is also made a feature of every grammar school grade. In some cases, pupils have made designs for decorations which they have afterward worked out in various materials from their drawings. It will be seen that the course of instruction is one tending to make the pupil capable, on leaving the grammar school, of making working views of any single object. He will also have gained some idea of

### How to Work from Drawings,

and a knowledge of the principle of decorating objects. Thus trained, the eyes and hands of these pupils will have that training so important in many of the arts and industries. The value of such instruction cannot be overestimated, when it is considered that the great majority of the inhabitants of this State are employed in callings which make such training valuable.

The exhibition at Quincy last June consisted of drawings, clay, wood and needlework, and comprised a large number of objects made by the pupils without assistance. The schools represented were the High School,

the Coddington, Washington, Willard, Adams, Quincy and Wollaston. The clay work—which was done principally by the primary classes in these schools—was greatly admired by visitors, not only for the great variety of objects reproduced, but for the unexpected excellence of the work, considering it was done by mere children. Beside geometric forms, as cubes, spheres, etc., a great variety of objects, such as birds, animals, articles of school and household furniture, tools, implements, and even statuary were attempted. Indeed, the number and variety of subjects treated was altogether surprising. Several of the exercises represented the combined work of a number of pupils; for instance, in a string of beads each bead represented the work of one pupil, and yet they were all in regular proportion, that is, the string of beads was large in the middle and tapering to the ends. A bunch of grapes was made up in the same way. A teacher's desk, a book-case, a brooding hen, turtles, a Jumbo elephant, and fishes and land animals could be seen on all hands. Many of the representations of animal life had a surprising amount of expression, showing the possibility of slumbering genius somewhere.

The figures made from colored sticks and colored paper were attractive, as well for the combination of colors as for the designs. Every object shown had its accompanying drawing or design, from which it was worked. For example, on the table of one of the schools were observed thirty-six designs for pencil sharpeners, wherein the wooden base and the covering emery constituted the principal materials, and yet every design of the thirty-six was different from every other one, showing that all the attempts were original and made by the pupils in a spirit of earnest and honest work. A similar idea was carried out in pin-cushions, lamp-mats and pen-wipers, many of which were richly embroidered in tasteful and even artistic designs. In wood, there was a variety of objects of household furniture—in miniature, of course—such as tables, artists' easels, match-safes, etc., etc. In drawing, it would be impossible to praise too highly the general merit which was everywhere manifest. To show how interested the teachers were in the work, one teacher conceived the idea of pasting a leaf on the corner of the drawing-paper of each pupil and then asking the pupils to each draw some design of which the figure of the leaf would be a part, or suggest a design of which it would form a part.

The plan by which these results were brought about, consists of a brief printed outline of the work of each grade, arranged under the heads, *Observation, Expression, Invention, or Design.*

From it teachers can get an idea of what their work should be as a whole, and can expand its exercises in each department at will. Teachers and pupils are thus saved much time which might otherwise be devoted to unprofitable repetition. It was shown that such an outline could easily

govern the use of text-books, and would answer as a guide in determining where to omit or substitute other exercises. Attention was called to the act, that most systems of drawing-books are arranged on the supposition that two should be completed in a year. Practically, outside of large cities, but one book is completed. Investigation shows that the principles connected with any one book are not enough for a year's work. The advantage, therefore, of a plan which will show the reasonable work of a year, and assist teachers in curtailing the exercises of a drawing-book cannot be overestimated. The importance of exercises on separate paper for each four or five pages of the book was shown. In this way greater interest is excited, and a collection of drawings obtained which may be exhibited at the end of the year.

The plan described is the basis of a course of lectures given every year at the Massachusetts Normal Art School. In connection with these lectures pupils give teaching exercises prepared for particular grades. They also prepare a sheet of illustrations suitable to accompany teaching exercises. These represent each grade of work. In preparing these exercises and illustrations pupils consult various systems of drawing-books in the school library. Thus attention is called to the best of all systems, and the pupil-teacher becomes an intelligent student of Industrial Drawing as a *subject* distinct from any particular system of books.

This method lies at the basis of the work now being done about Massachusetts at special meetings and institutes under direction of the Board of Education. It has also been adopted by the normal schools of the State, where more particular attention is now given to teaching exercises, which largely take the place of sets of certificate drawings. As each teacher of drawing in these schools is virtually independent of any supervision, it is not possible to state at present the results which may be achieved. As yet the plan has not had time for complete development. The tendency, however, to make the State work more uniform in all departments and to connect it as closely as possible with public school work shows a marked advance. It should be particularly noticed by the friends of manual training that the objects exhibited made by children from their own drawings show that drawing, if taught as described, will be of the greatest importance in developing ideas connected with work-shop instruction. Although manual instruction may not be introduced, a great deal in that direction may be done where Industrial Drawing is properly taught.

# EVENING INDUSTRIAL DRAWING SCHOOLS.

BY OTTO FUCHS, BALTIMORE, MD.

THE benefits and advantages arising from these schools of Art and Industry in our manufacturing communities are of sufficient importance to engage the attention of all who feel an interest in the welfare of the working classes and the prosperity of our manufacturing industries. As the comfort and happiness of mechanics and artisans depends upon the prosperity of the business which furnishes them employment, so the success of the latter depends largely upon the skill and industry of the former. Skill in workmanship must be cultivated, and since the majority of those depending upon their handiwork for their support have not the means to obtain their training in technical schools or avail themselves of private instruction, the Evening Drawing Schools, which are in some places entirely free, in others charging but a nominal fee, are among the most beneficent institutions, and their influence cannot be overestimated. It is not only that the instruction given there is of the greatest practical value to young men engaged in industrial occupations, but the moral influence over the minds and habits of the young is of the greatest moment. Where the opportunity is wanting for young men to attend such a school during the winter evenings, many waste their time either in doing nothing at home, or in the pursuit of frivolous, perhaps questionable, amusements abroad. That these schools and the instruction given there are appreciated, is abundantly attested by the large attendance wherever they are established and properly conducted. Upon this latter head it is proper that I should dwell with particular emphasis, since thereupon depends almost entirely the success or failure. First in importance is : Suitable accommodation, which means sufficient room, well lighted and ventilated and fitted up with convenient tables and abundant blackboard space for demonstrations.

Second : Efficient teachers, who must be good draftsmen, thorough disciplinarians, and possess the faculty of imparting information in a clear and thorough manner, who must also be sufficiently interested in their work to study the most important needs of their pupils as to the character of the work most useful to them, which of course depends largely upon the industries in which they are engaged.

Third : Arrangement of course of study. This requires good judg-

ment and perfect familiarity with the capacity and intellectual attainments of the pupils, not that any special line of work should be given to each pupil, which is entirely impracticable, but to suit the course to the requirements of all in a general way.

Fourth : Divisions and classes. In most Evening Drawing Schools there is need for three divisions : free-hand, mechanical, and architectural, and where the schools are large enough, there should be separate instructors in each of these, and every division subdivided into three classes : Elementary, Intermediate, and Advanced, which makes the full course in any division extend over a period of three years. In order to carry on a systematic course of instruction, attendance must be prompt and regular, and the pupils properly graded, advancing from one class to another, as they are qualified, and not before.

The most effective method of instruction is undoubtedly by lectures and demonstrations on the blackboard to the classes, followed by such individual help as may be needed.

In explaining methods or problems do not go over too much ground at one time, and be sure that whatever has been explained is thoroughly understood by all. Give frequent reviews of subjects gone over, and encourage the pupils to ask questions bearing upon their work.

Insist upon neatness and accuracy, and require all drawings to be finished. An excellent practice is to examine all drawings when completed, and mark them; this stimulates ambition in pupils to improve. Let all the work throughout the school that can be so be from models and objects and dispense entirely with copying from the flat, the latter can be practiced very well at home. Urge the pupils to practice all they can at home, and bring their work to school for criticism. This is very important, for the whole time spent in school during one term aggregates only from twelve to eighteen working days of eight hours each.

By carrying out this system I secured the following results at the Maryland Institute in Baltimore, which has one of the largest Evening Drawing Schools in the country, having in the Free-hand Division about 250 pupils, in the mechanical 150, and architectural 105, with a corps of teachers respectively five, three, and two.

The work done in Free-hand Division is as follows, viz.:

In Elementary Class, twelve drawings on half imperial sheets, including the following subjects:

1–4.—Lines, Planes, and Geometric Solids.
5.—Human Features.
6.—Ornament.
7–9.—Geometry and Perspective.
10–11.—Drawing of Natural Objects in Outline.
12.—Elementary Design.

The Intermediate Class begin again by drawing a group of geometrical solids and natural objects in outline, covering two half imperial sheets, then continue perspective, also two sheets, finally light and shade drawing in charcoal, first geometrical solids, three sheets and natural objects, first single, then groups, two sheets, making in all nine drawings.

The Advanced Class work consists of drawing ornaments shaded in charcoal from the cast, still-life groups, and heads from the antique ; one finished example of each subject being required in order to graduate, and those who complete their work before the end of the year practice drawing heads from life in charcoal.

In the Mechanical Division the pupils begin by drawing geometrical problems, plane and solid, intersections and developments of surfaces, six sheets. All this work is explained at the blackboard, and every solid object drawn is illustrated by models, which are passed around and examined by every pupil in the class.

After geometry they take up drawing of machine details, first very simple objects are drawn, the arrangement of different views explained, and everything required to be drawn accurately to scale ; when they have learned to make a good, neat, and accurate pencil drawing, they are taught to make free-hand sketches of various pieces of machinery, and next inking. The last drawings are finished in ink and drawn from their own sketches taken from the models. The entire set comprises fourteen drawings and sketches.

The Intermediate Mechanical Class begin with advanced geometrical problems and orthographic projection; every drawing must be finished in ink, using different colors. From geometry they pass to the projection of screws, proportions and arrangement of pulleys and belts and construction of gears; finishing the course with sectional view of a pump, steam cylinder, or something of that description.

The Advanced Class work entirely from a model of a steam-engine, of which they must make a complete set of free-hand sketches and measure all dimensions, then make a finished set of working drawings, including general plan of engine, upon which they graduate.

In the Architectural Division the same plan is carried out as in the Mechanical with the exception that structural details of buildings are substituted for machine parts, and the advanced work in this division is to make a complete set of working drawings, *i.e.*, plans, elevations, and section of a building, the general design being furnished them in the form of a perspective view taken from an architectural journal.

I think it will be seen that the several courses which I have described above and illustrated by specimen drawings made by our pupils is at once thorough and practical, and every time the school term closes, I hear many expressions of regret that the vacation is so long and the school term so short.

I will state also that we have a Past Graduate's Class in each division, which those who have graduated can attend and continue to practice any special branch or subject. This is a new feature in our school, which will receive its first trial this year, and I expect very gratifying results, not only in the good work the students will do, but also in the example and emulating influence they will exert over the younger pupils.

# ELEMENTARY DEPARTMENT.

First session in the Methodist church was called to order at 3.20 P.M. by the President, Wm. N. Barringer, Newark, N. J.

The following gentlemen were appointed a committee to nominate officers :

Joseph Clark, New Jersey.

E. J. James, Pennsylvania.

Mrs. Eva D. Kellogg, North Carolina.

H. F. Harrington, Massachusetts.

A. W. Clancy, Iowa.

Mr. W. E. Sheldon of Boston suggested that there were too many departments, and that an invitation be extended to other kindred departments to unite with this in its sessions.

Mr. Barringer, the President, then gave the opening address, of which the following is a syllabus :—

1. Range and extent of our school work, through all departments and grades, from Kindergarten to close of University course.

2. Population of the country nearly 60,000,000. School population 15,000,000, of which 10,000,000 are in our schools.

3. Number of schools 250,000. Number of teachers 325,000.

4. Number of normal schools 250. Number of pupils in them 60,000. Number of teachers employed in them 2,000. This indicates a very large field for our work.

5. The foundation work is done in the elementary schools. Their importance cannot be overestimated.

6. Need of psychological study.

*a.* What is mind ?

*b.* What is it to learn ?

*c.* What is teaching ?

*d.* What is study ?

7. What is it to know ?

Necessary notions or ideas before we can learn or know.

Intuitional ideas.

Time.

Space.

Right.

Wrong.

Good.

Beautiful, etc.

8. The ways in which we may know or learn are four :
   *a.* Observation.
   *b.* Testimony.
   *c.* Reflection.
   *d.* Instinct.
9. The use of the library as a factor in educational work.

Distributive System.

Concentrated.

Which was discussed by the following persons :

Mr. Richards of Washington, D. C., said he was sorry to see that the work of this department was turning off in a direction not intended when it was founded. This branch is the most important; we have theory but we want practice.

Miss Christine Schenk believed, that the heart and conscience of the child should be educated.

Mr. Winne of Albany said that teachers do give attention to the soul culture of every boy and girl under their care.

The second paper read was :

## THE TRUE OBJECT OF EARLY SCHOOL TRAINING.

BY CLARENCE E. MELENEY, SUPERINTENDENT SCHOOLS, PATERSON, N. J.

In undertaking to treat the subject that has been assigned for this hour, I do not presume to present anything on my own authority. It might appear that, in assuming to define the true object of early school training, I had discovered the truth while others around me have been groping in darkness. I do not claim to have anything new ; not even a single idea that is original, but shall content myself with bringing before you what I have gleaned on the subject from others who have gained a wider knowledge and have profited by a longer and more valuable experience than has been my privilege. The end and aim of education is the development of character. This is a self-evident truth borne out by the authority of the wisest philosophers and educators since civilization began. To maintain this proposition by argument would be a waste of time. While this truth needs only to be stated to be accepted, it is important to consider what are the means and methods by which this object is to be attained. The attainment of the highest possibilities of the human character depend on the development of all the powers of the body, mind and heart. As stated by psychologists, man is a unit, all the powers of the soul work together for its perfect development. Neither the culture of the intellect alone, nor of the feelings, nor of the will can form a perfect character according to the Divine purpose, and the possibilities of the human being. The cultivation of the faculties of observation, of memory, of imagination, of judgment should be brightened and beautified by the finer cultivation of love, and admiration for the beautiful in nature and in art, and be enriched by the exercise of the emotions and sympathies. With the training of the hand, the head, and the heart, the child should realize the existence of law, the duty of obedience, and should learn to subordinate his will to, and harmonize his actions with, the overruling authority, in order that the beauty of his character may appear in the light of a true and beautiful life. The time has been when a work of this magnitude and responsibility was referred to higher institutions of learning, and there are to-day those who say that the public schools, and especially the elementary school cannot be expected to do anything in this line. It is my purpose to show, in this paper, what *early school training* must aim to accomplish in the direction of character building. It must be conceded that the *early training* of a child gives bent to his whole

future life. It is not in the high school and university that the character is formed. There the superstructure is added to the foundation previously laid in the elementary school. The age at which children leave the home circle and enter the broader realm of the school is the most important, and the most critical, because the most susceptible period of life. This is the most appropriate time for the impression of moral ideas, because the opportunities are so great for the proper training, while the hindrances and pitfalls in the way are so many. If the powers and characteristics of a child are not directed in the right channel in early life, no amount of training or teaching in after life can develop perfect character. We do not by this intend to maintain that perfect development can be accomplished in the elementary school, yet it is important to consider how far the early school training can be held responsible for this work. First let us consider the different stages in a pupil's life. For this purpose pupils may be classified in periods of *infancy*, from birth to the eighth year, *childhood* from eight to fourteen, and *youth* from fourteen to twenty. Some of course develop earlier than others, but physiologists tell us that the brain does not reach its full fructual growth till the eighth year, and that the functions of the body undergo great changes about the thirteenth or fourteenth year. Allow me here to quote from Dr. Jacobi, a celebrated authority on infant hygiene and public health.

He says: "The result of anatomical and physiological facts corresponds fully with the demand of Frederick Froebel, whose experience and intuition both led him to postulate the eighth year as the period in life in which children should be sent to school regularly. Until that time they were to be entertained and developed in the kindergarten. Here their activity is regulated, their attention exercised and their muscles invigorated. Both imagination and memory are taxed to a slight degree only. With increasing years, the young gray substance (of the brain) becoming more and more developed, the thinking powers are gradually evolved. As soon as there is sufficient anatomical basis for them it will not do to neglect any possibility. The secret of a thorough education lies in the uniform development of all the powers." The report is too long to quote in full.

Our school curriculum does not take these physiological facts into consideration. For instance, we take children, according to the State law, at five years of age, and set them to work learning to read and studying arithmetic, and demand of them more than they can do in three years. It is impossible to pass unnoticed the fact that too much has been, and is now being expected, I may almost say demanded, of the primary schools; too much in the way of *acquisition* of knowledge. Of late years, since the "new methods" have come to be used as a kind of educational "show," the work of the "first year pupils" has been a source of great surprise

and admiration to visiting teachers and friends. I shall here have to plead guilty to having been something of a "show man" myself. But I have reformed. More has been required than can be accomplished, until teachers have resorted to the expedient of detaining children in first year classes for the sake of parading them as smart pupils. May we be forgiven!

Policy has actuated some teachers in the efforts to have children become proficient, because parents are always so much in haste to have the child "know his letters" or recite "something from the book." Teachers who realize the importance of proper preliminary training often admit that they are obliged to push little pupils rapidly in order to satisfy the demands of ambitious and unreasoning parents—when the subjects would be better suited to their capacity at a more advanced period. Is it not true that the course of study prescribed for our primary grades is ill adapted to infants of five years of age? We have often been delighted by the proficiency shown by children in their first year of school and like to show them off, but on close examination these are exceptional children, or in many cases have had the benefit of previous training or have been surrounded by the most favorable circumstances before coming to school. The larger number of children are at that age unable to do the work prescribed. Little ones who are sent to school at five years of age should not be put to work on reading and arithmetic; instead of requiring proficiency in *studies*, the work and thought of the teacher should be directed in another channel, namely, the development of character, which is the object of education, and should begin with the first years of a child's training. The highest possibilities of the human being lie in the direction of his moral nature, consequently, *moral* training is of the first and highest importance. The wise teacher knows that the best way to reach the intelligence of the new scholar is by winning his heart. Through the heart to the mind has become the recognized mode of procedure. The natural school of infancy is the home where love abounds and tender care watches over the growing, observing child; but, unfortunately, love is a stranger in many homes, or the tired and overworked mother finds little time for the discharge of the many tender attentions which call out the finer traits of the child's character. There are two classes of neglected children in our cities—those who live in poor homes where only the animal instinct of life-preservation is indifferently cared for; and the children of the wealthy who grow up in the care of ignorant nurses, who do more to stamp and mold the character of the little ones than their own mothers. From the nursery these unfortunates are sent to private schools, where often the so-called teachers are lacking in all knowledge of child-training, and wanting in all the characteristics that go to qualify teachers for this important work. It is fortunate that there are a few who have the natural ability, the requisite training, and the spirit of the

true teacher, to comprehend the needs of this neglected class, and to open the gate for their proper entrance to the road to knowledge. But the number of children blessed with this opportunity is so small that it only emphasizes the importance of getting this work on to the system of public education, and bringing these born teachers into a field of larger and greater influence. The education of the masses during the early years, before they are able to undertake the work of our primary schools, is at present the most important problem of the day. To allow them to remain in ignorance, or to place them in the care of such persons as I have just described, is a neglect which unfits them for the school work to which they come, and consequently retards the progress of the primary schools. For this reason Boards of Education must take the children, for a little time at least, and provide for them, when trained teachers, imbued with the spirit of the Master, can take them into their tender care. The age at which children could be taken into these infant schools is four years, which would give three years for the training and directing of the activities of body and mind, and would properly fit them for the school of childhood.

I advocate the passage of a school law admitting children at four years of age instead of five, and an additional State appropriation for the establishment of infant schools, according to the best principles of infancy education. This law was suggested yesterday by a unanimous vote of the council, which strengthens the force of this recommendation. But as I have been trying for some time to impress its importance upon the people of New Jersey, I cannot be accused of appropriating the idea from the highest authority of educators in this country, as my friends can vouch. The opportunities for the moral education of the child are greater in school than they possibly can be at home, or in any other associations in life, for here the child is placed in a little community. Rousseau was blind to this principle of association and would bring up Emile alone with nature—but Froebel, with a greater heart, and greater intelligence and common sense, realized the importance of educating the child in a company. The relation to society—the influence there is and can be brought to bear upon his neighbors, and the influence for good or evil to be sustained by intercourse with others, should be a part of that education which is aimed at character-building. The child is a social being, and this fact makes his education all the more easy. He is easily impressed and influenced by numbers. His association in a group or class renders him more accessible and tends toward stimulating and encouraging the opening and outpouring of his nature and feelings. A child is sympathetic and needs sympathy; he appreciates and needs to be appreciated; he is full of gratitude and needs to be praised; he is ready to help but needs a helper. He ought to be educated to understand himself, his

nature, disposition, abilities, his influence, his responsibilities, his obligations, and to recognize the abilities, powers, goodness and rights of others. Such a training must certainly fit a child for the duties of citizenship, and teach him to take his proper place in society. This is important as a means of developing his own character as well as fitting him for a life among others. A development of the child by himself, apart from his relations to others, would make him egotistical, conceited, and selfish, whereas a due regard to his social nature and relations would make him considerate, unbiased, sympathetic, generous, large-hearted.

There are evidences *on* every hand to show the need of moral training of the rising generation.

The proper management of business and the condition of society demand quickened consciences.

The limits of this paper will hardly admit of a thorough presentation of the subject of the moral side of education, yet as this is the first object of early school training, a brief treatment of it must be given. A principle that underlies all society is truthfulness. This is one of the first lessons a child must learn ; allied to this honesty of work, a love for genuine, plain simplicity, devoid of all shams and deceit. The habit of misrepresentation and misstatement is a very common one in all walks of life, so much so that it has become to be regarded as stock in trade, one way of doing business. The boy who goes into a store, or contractor's office, or almost any business, soon learns how to be "smart," to drive a close bargain, to make the most profit out of the least material. This age of invention and imitation has learned to make excellent articles to take the shine off genuine ones. There is great danger that pupils may catch this idea when the teacher shows off on inspection day, and "crams" for the examination. Let us all live up to the truth, and sacrifice the outward polish and show for the sake of establishing a respect for honesty. When we make a scrap-book showing specimens of pupils' work let us be honest enough to say these are the best samples from the most advanced pupils, and not an average product of the whole class. *Fidelity to trust* is something that children should learn before they are fitted for the duties of life. To complete the lessons that teach a life of duty, we must add obedience, respect for elders and those in authority, for parents and teachers, reverence for those who should be esteemed. Are not those more important than lessons in any other direction ?

I have had an opportunity of comparing the manners and behavior of our American youth with those from other countries. The German and English children, of whom I have seen more than any other foreigners, are the most docile, the most teachable, respectful and obedient. One of the blessings of a monarchical government is the feeling of respect, of reverence, and loyalty to superiors noticeable in the conduct of children.

In America this is wanting. The child rules the family and rules the school. Authority seems to be reversed. The child is the father of the man in a new sense.

The training to truthfulness, obedience, and fidelity should not be separated from the training of the intellectual faculties. The intellectual and moral natures are so blended into one being that their development must be simultaneous; all the exercises tending to the enlargement of the mental faculties may be so utilized as to train the moral sensibilities at the same time. There must be no conscious separation of purpose. If the child appreciates his instruction at all, he must not realize that some work is intended for his mental, and other for his moral improvement, nor is he likely to. No more must the teacher have distinctive purpose in view. She must be actuated by one purpose only, the development of the whole being. Elementary training is a more comprehensive term than elementary instruction, and is intended to include the whole course of treatment in the early schooling of the child. The object of this training is not only to develop the moral nature but to stimulate the proper intellectual and bodily activity. The body, mind, and head must grow together.

God intended that every child should grow into a perfect man or woman, and it is only when unfavorable circumstances attend his birth and bringing up, or artificial devices are applied by those whose duty it is to train him properly, that he fails of the wise purposes of Providence. To stimulate the healthy growth of the child in all his powers it is necessary to follow the leading of nature. The great teachers who established the principles of education recognized this, and directed all their efforts in the line of natural laws.

*Rousseau*, in spite of being one of the most impracticable of men, an absurd extremist, utterly wanting in ability to practice the theories he advocated, established his name and fame among educational reformers in consequence of his grasp of the idea of *nature as the true educator*. *Froebel* took his place beside the little child and studied human nature by learning the workings of the child's mind. He learned that natural growth requires the harmonious exercise of all the powers of body and mind. All the functions of the body and faculties of the mind are developed and strengthened by systematic activity.

One of the most wonderful and important characteristics of human nature (and all animal life in fact) is *activity*. In the young it is most intense. This law of nature is at the foundation of all education and all industries and progress. The child is constantly active, and this propensity is to be taken advantage of in education and training. If it is not done in the case of the young child, if instead the crime of repression, or of compelling the child to sit still and simply be a receiver is perpetrated, one of the objects of education is lost.

By activity alone can the parts of the body become strong and vigorous ; by constant activity or exercise of the faculties only can the mind grow and acquire power. Activity is requisite for all business and enterprise. In no age of the world's history, and in no country in Christendom has there been more demand for activity than in the United States at the present time. Hence one of the most vital objects of early school training is the proper stimulation of a child's natural activity that will develop into a love of work and a respect for honest labor. The demand of the time is for labor, and for men who can do something. A man is valuable to a community, not for his information, or for his wide general or specific knowledge, but for the use he makes of it. We ask what does he do ? What can he give to the world ? More will be required of the coming generation than of the present, and it is for us to rear the men and women to meet the demands of the times.

It is important to inquire how this activity can be properly directed. Experience shows us that children are easily kept employed when the work that is suited to their capacity is furnished them. Lazy children are seldom found, except when they are required to do something that is not properly adapted to them. Judgment must be used in assigning the proper work that will engage their attention willingly, and will at the same time exercise their faculties. The result will be a love for the work and habit of perseverance and industry. Thus is gained the ability to work, and the power of attention by which all knowledge is acquired.

The great object of the primary school has been the acquisition of knowledge. Now, the best authorities agree that it is not so much the knowledge gained in the school, as the power of gaining knowledge that is important to the child.

The development of power in the child is then to be the object of all school-training. The acquisition, which in itself must not be underestimated, is to be used to gain the power of acquiring more. When the objects of study are properly presented the child learns how to study, he becomes a self-teacher.

Since the child gains information through the perceptive faculties, these must be trained in the order in which they are called into requisition. The habit of observing should be the first in which the child is to be trained. All subjects should be carefully arranged by the teacher to stimulate this activity. She must be careful to supply the proper material whether in the line of work or in play for the satisfaction of the child, that is, for the healthy growth of his powers. She must use great discrimination in the selection and judgment in supplying the proper amount and in using it at the right time. A proper bodily training demands a watchful care of the body and a healthy exercise of all its parts and its functions, exercise of the limbs, delicate and careful use of the hands and

fingers to develop a fine sense of touch and a skillful manipulation. By proper use of all the material at hand all the senses become acute and active: *sight*, a quick, observing eye; *hearing*, the attentive, listening ear. Thus are formed the mental habits of observation, attention, reflection, and memory. By careful adaptation and guidance the higher mental powers of imagination, love for the beautiful and good, appreciation, reverence, and obedience are stimulated.

Not only are the activities of the mind to be directed to the acquisition of knowledge, but *to work, to do, to create, to adapt to useful purposes*, and to *give to others the product of one's labor*. I have indicated, in a general way, what is regarded by the best authorities as the object of elementary training. Time would not permit a presentation of all the subjects and occupations that ought to be used for the development of the powers of the child; that belongs to the realm of methods. But the question might be asked, are the conditions favorable for the carrying out of such an object? The reply may as readily be made that the conditions can be made favorable.

As previously stated, children should be placed under the care of experienced teachers at an early age, and the training should begin by the system founded by Froebel. Four years of age is a suitable time for the exercises and work that train the faculties just then being called into activity.

The educators of to-day do not need instruction upon this subject. All recognize the importance of the early cultivation of the powers of the child. But the public need to be educated in this direction; they demand results in book knowledge beyond the limits of reason before any opportunity has been given for a more useful training; they look for a return for the money invested and expect products according to their own ideal and not according to the educator's ideal.

It is not surprising that teachers give way to the demand, even when they know better; but I fear some need instruction and lack knowledge of what should be the course to pursue. Teachers are impatient to see the results of their efforts; we must remember that power is of slow growth; it is not easily discovered, and true progress is not easily measured. True teaching will show results, perhaps not from day to day, but from term to term growth may be measured.

Teachers must have faith in their work, and must be consistent and persevering along the line of progress. We all need to be taught; we all need to study the great masters; we all need to be firmly grounded upon principles; we do not need to *copy* methods, but to be imbued with the true spirit.

To conclude: I will merely attempt to show how the principles given by Froebel are to accomplish the highest aims of elementary education, for

he, more than any other teacher—excepting the Great Teacher—appreciated the proper adaptation of means to the condition of children to be educated.

Froebel recognized the value of play as a factor in a child's education. This inclination is to be directed toward activity and industry, and to lead to the development of the social culture in fitting the child to understand and appreciate the demands of society. He saw that the natural instinct of a child to make something, must be directed year by year toward industrial pursuits, the occupations then were applied in the expression of thought by the use of materials in construction.

The result of such a training will stimulate a cheerful love of occupation and a happy devotion to it—a knowledge of what ought and can be done, and a skill in doing it; it will develop a skill and power of the hand, keen senses, and train the intellect; a discriminating judgment, and an appreciation of what is best. Withal, the children will acquire a modest, unassuming self-consciousness of power to accomplish work and an appreciation of the product.

Froebel's ideas of physical, mental, and moral culture suggest for all grades of the elementary school such training of the body as will enable it to endure any hardships and accomplish any work required of it; such instruction as will be suitable for the mind during its different stages of growth; such presentation of the good and the beautiful as lead to the highest appreciation of the artist and a conscience that need not hesitate in choosing the right. These ideas can be put in practice by utilizing all the means at our disposal and by modifying the application of the materials appropriate for our purpose. The secret lies in making the development of the child the end and using the subjects or materials as the means. The development of all the human powers of a man lays a broad foundation upon which all occupations and industries are based; it starts him on the road to industry and cultivates his tastes, judgment, and understanding so as to fit him to select the calling his tastes and capabilities suggest.

Brother Azarias, President of Rock Hill College, Elliott City, Md., said there was no nobler work than that of educating the youth from childhood to manhood.

Mrs. Heath, of Boston, said if some one would only come prepared to say that *this* or *that* method had been tried with children of certain ages, for a certain time, and state what progress, if any, had been made, something might be settled.

The third paper read was:

## *LANGUAGE AS AN EDUCATOR.*

BY Z. RICHARDS OF WASHINGTON, D. C.

He is a wise man, who, desiring to accomplish any important work, not only counts the cost, but assiduously seeks for those means and instrumentalities, which are the best calculated to accomplish it. If the work is difficult and urgent, he may be obliged to experiment, and try new means, until he discovers the most appropriate agencies.

The great and the chief work of this life is education, in its broadest senses. Life is a school, a probationary state, a training school, the temporal residence of our spiritual being. The *value* of life depends upon the amount of healthful, mental, and spiritual development which results from the environments of our probationary state. Hence development, or education, should be our chief concern ; if so be, it serves to conform our spiritual natures to the divine model. Whether we will, or not, these environments of life are continually exerting a training influence, and are therefore our educators.

The Author of our being has kindly provided just such environments as we need, which, as the language of nature, are His methods of educating all His intelligent beings. Everything in the natural, and in the spiritual world, has a voice to impart some kind of instruction. This voice conveys the lessons of nature to our perceptive faculties ; and thus the impressions of nature constitute her language ; and one of the most important results of a complete education is the ability to read and understand this language of nature. He is the most highly educated who understands this language best. The book of nature contains all we need to know of this physical life ; and the Book of Revelation all we need to know of the spiritual life. But this book of nature cannot be wholly read by all in nature's language, because it is not accessible to all. Its records must therefore be translated and put into a kind of artificial and portable language. This is the language of the tongue and of the pen ; to be used as the representative of facts and principles, which are to be garnered up, and communicated to intelligent beings, when required. To acquire a knowledge of the meaning and use of this language, is the chief end and aim of all educational training. The facts and principles, which it represents, are embraced in the usual curricula of training ; in their own peculiar language, made up of arbitrary sounds and signs. Every

branch of knowledge in the school curriculum has a language of its own, though all the branches have a language in common. This fact should be more generally regarded in the preparation of text-books, for reading any language ; and also in methods of teaching. But the several branches of school study are generally used as though they had nothing to do with language training ; and reading-books, especially, seem to be prepared and used as grand depositories of words, without specific reference to their use or meaning as furnishing a vocabulary for the use of the children.

But the chief work of elementary school training consists in making the children thoroughly acquainted with the linguistic signs, which represent the knowledge they must acquire, for the formation of a true character. Each of the branches of school training, therefore, in its *elementary* principles, at first, should furnish material for language training, as a necessary preparation for studying the more abstract representations of knowledge.

By way of illustrating the views just expressed, let us take any one, or more, of the branches of school study.

First, English Grammar :—Some of us remember the time when it was a mark of distinguished school training to be able to repeat the definitions of old Lindley Murray's *Grammar*, beginning with "English Grammar teaches us how to speak and write the English language correctly," and ending with Prosody and the elements of Rhetoric.

This was a well-intended book, and contained a great many important principles. If, however, the first definition had been "The English language teaches us how to understand the principles of English Grammar," reversing the old definition, it would have been quite as appropriate, and more in accordance with nature's laws. English grammar, as usually studied, does not teach us how to speak and write correctly. Who ever heard of a person becoming a good speaker, and a good writer, by studying Lindley Murray's, or any other author's *English Grammar*. We learn to speak and write correctly, by *speaking and writing*; under the instructions and example of a good speaker and writer. Hence the teacher, who is not a good speaker and a good writer, is not a good teacher; though he may be able to repeat Kerl's *Grammar*, with all its rules and exceptions, from beginning to end.

Again let us take Arithmetic :—As a general thing, teachers and educators do not see any important relation between arithmetical training, and linguistic training. In preparing a course of *language training*, the last branch, and, as many would say, the most unsuitable branch, to be selected, would be arithmetic.

Arithmetic, they say, deals with numbers, and not with words, or language.

The science of numbers is too generally looked upon as a kind of *cabulistic* science, entirely foreign to linguistic science. But numbers, like the principles of chemistry, botany, or any other science, can be used in practical demonstrations, only as they are represented by signs; and these signs make the language of numbers. Each sign has its specific, exact, and unchangeable meaning; and each combination of numbers has a new and relative meaning; and hence, we find that the science of numbers is reckoned, as an *exact science*, because it has, unlike the language of any other science, an *exact*, unchangeable language, capable of only one interpretation, which can be used only as it is understood. The *first step*, therefore, in teaching numbers, is to teach the *alphabet* and *language* of numbers; instead of teaching their *logic*, as has been the case in the past, and is even now.

We can teach arithmetic then, successfully and philosophically, only as we *first teach its language;* and it has a language of signs, peculiar to be sure to itself, but in principle, the same as signs of any other language, and as easily learned and comprehended. The failure to teach this language, at the outset, is the chief cause why, by the common methods of teaching arithmetic, so much time is required, usually, to make a subject of so *few principles* fully understood. Children are required to flounder through the *logic* of arithmetic, before they understand its language, and before their logical powers have been properly trained or developed.

In memorizing uncomprehended processes in *logical* arithmetic, they may, indeed, by slow degrees get some knowledge of arithmetical language; but there is a great waste of time, much mental torture, and a consequent dislike of the study, until the *language* of numbers is mastered; when, as by magic, the mysteries of arithmetic seem to be revealed through the educating power of language.

Again, let us look at Geography as a linguistic study. Every one believes it highly important for every child to know as much as possible about the world, and especially about the country in which he lives. The value of historical and topographical geography is not to be questioned; yet there are very few children who do not acquire a disgust for it, simply because they are required to memorize uncomprehended language, and unmeaning names, before they have learned the first elements. They may learn to say that "Geography is a description of the Earth," which conveys about as much meaning to them, as to say, that "Fluxions is a department of analysis;" or that "Conic sections treat of the parabola, the hyperbola, and the ellipse." This abstract language is correct; but it is an unknown tongue to them until the simple elements are learned, by being associated with simple terms and names where meaning can be *objectively* taught. Let the child see the parts of the earth and seas in reality, or by miniature models with clay or sand; and learn the

representative names, until the specific language of geography is mastered, and its study will cease to be heavy and repulsive. Nothing serves so effectually to disgust children with any branch of study, as an attempt to master it, before they understand its language.

Some may say, "How can the language of a science be learned without the use of text-books?"

The trouble is, that the language of most text-books is too comprehensive, and condensed, in order to express the formulated principles of the several branches of knowledge; and these text books are put into the hands of children to *study* before they have learned *how to study*, and before they have been taught the simple elements of these branches, or the meaning of the terms which are used to represent them.

In order to meet this difficulty most authors of school books have attempted to grade and simplify their books by diminishing the *amount of matter* rather than by *simplifying the principles* and by teaching them in an elementary form. It is not an uncommon thing to find the language of what are called the *lower grades* of text-books quite as abstruse and difficult to understand as those of the higher grades; while, on the other hand, some have tried to clothe philosophical principles and the laws of science in the language of babyhood.

In *Mother Truth's Melodies*, natural history is attempted in this wise:

> "An ass and mule bray out,
> Our race is assinine;
> And very like us seem some of
> The human race divine!"

And we have also a little *astronomy* in—

> "Hi diddle, diddle, the sun's in the middle,
> After Saturn comes Uranus far; and his antics so queer
> Led astonomers near, to old Neptune, who drives the last car."

In a certain *primary* arithmetic the child is told that "arithmetic is the science of numbers," and "the art of numerical computation," "and that the local value of figures increases from right to left in a ten-fold ratio," and the same language is used in the higher arithmetics. This is one method of *simplifying* arithmetic. Again, on the second page of an elementary grammar, we find this language to be memorized of course: "The *subject* denotes that of which something is said or affirmed; and a *predicate*, what is said or affirmed;" and "a proposition is a subject combined with its predicate." This is the simplified language for beginners in grammar, used also in the highest grade of grammars.

Again, in the *primary* geography of a certain author, the child is told

that a "*continent is the largest division of land;*" and in his highest work, he says "*a continent is a very large body of land.*"

Many other similar specimens of attempted simplification of language in grading text-books could be given, which may be called simplified nonsense. Such absurdities can only be avoided by *teachers* who fully understand the true principles of language training, for the text-books only increase the trouble.

The art of teaching requires that the teacher should always bear in mind that all knowledge is made up of elements; and that elements are generally simple and easily comprehended, and are to be taught as elements at first, accompanied always each with its appropriate sign—either *literal*, or *figurative*, or *real*.

But when elements are combined, or used *relatively*, new thoughts and new meanings are developed, oftentimes requiring judgment, experience and logic before these characteristics of scholarship are acquired.

If children are expected to acquire knowledge from such combined and related elements as are generally found in our text-books, before they have learned the meaning of the simple elements, they either fail to comprehend the complex language, or they are compelled to rely upon memory; an alternative which is most common, and erroneously called *studying*. The process of crowding many facts and principles into the minds of young children by the aid of memory is generally considered *teaching*, when in reality it is only *cramming*. The great anxiety of parents and oftentimes of teachers, to make prodigies of their children, leads them to crowd their children forward, and to put into their hands text-books of formulated principles, erroneously believing that the memorizing of condensed, abstract, and general propositions and statements is education. But knowledge can be assimilated by untrained and undisciplined minds *only* as they can masticate and digest the simple elements, and thereby become prepared to utilize combined elements as a wholesome nutriment for promoting the growth and education of the whole being.

What has been said in relation to grammar, arithmetic, and geography, as subjects to be used in language training, is equally applicable to all other branches of school training.

What, then, are the appropriate means to be used in elementary schools to secure the best results in language training? The educational world has hitherto been experimenting on this question.

All sorts of devices have been invented, with more or less success, according as they approach nature's methods. Progress has indeed been made, and there are very few now so old *fogyish* as to attempt to give the first lessons in language as they were given thirty or forty years ago. In fact, scarcely anybody then even thought that teaching the child to memorize the alphabet from *a* to *izzard*, and learning the *a-b abs*, and *e-b ebs*,

was giving a *language lesson;* and, though it really was so designed, there was little or no language teaching in such work, if language is to be considered a means of conveying thoughts and ideas.

We have now the alphabetic method, the word method, the phonic method, and the sentence method of teaching first lessons in reading. Each has its use, but is incomplete and unsatisfactory in itself. Only as they all are judiciously used in combination is perfection approached. This combination of methods may properly be called the "*ideal method,*" because its legitimate use results in the imparting of ideas and new thoughts to uneducated minds.

The first requisite to secure efficiency in language training is, to secure teachers who are masters of our language. It is now a commonly repeated maxim that "Teachers cannot teach what they do not know." But what proportion of our teachers have a sufficient vocabulary of their own or an adequate command of language, without resorting to books to convey a clear and connected meaning of the principles of the common text-books to uninstructed minds?

They may have memorized certain formulas, rules and definitions, but can they embody their sentiment in language of their own and illustrate the same? How many, even in their own private sanctums, are able to write out complete descriptions of the commonest branches of school training without resorting to books? The teacher must be an embodiment of every principle he wishes to teach, and he must teach this principle by the use of language.

How many, even of the graduates of our best normal schools, at the age of eighteen or twenty, have a sufficient knowledge of common English to give names readily, and use intelligently the language which ought to be used in teaching and illustrating the principles which are to be implanted in the minds of children?

The trouble with most teachers of elementary schools is, that their vocabularies are so limited and insufficient that they are soon exhausted. Do not understand, however, that *good teaching* consists in the number of words used, but in having such a command of words that the right word can always be readily selected at the right time and in the right place. A good teacher will use discrimination and not redundancy in employing words, but be must have a full vocabulary in order to represent thoughts accurately, or he will be always liable to fail in using the *right word* at the right time. Here we find the most notable deficiencies in elementary teachers, who, especially, ought to have the very best command of language. But the common custom in selecting teachers is to put the most *illiterate* teachers in charge of schools where the best knowledge of language is required, losing sight of the fact that it is in the lowest grades where children are going through the formative process of language train-

ing. The absurdity of this custom must be evident; but when will it be abandoned?

The next requisite to secure efficient language training is to have the reading-books, designed for elementary training, so prepared that they shall contain the elementary principles and the appropriate *word signs* which are to be used in any of the future branches of study. These elements and their specific names should be so used in connection with the common language of life, that children may be able to understand them when used in the more formulated language of their text-books, so as to prepare them for studying those books afterwards.

In the first place, there should be *linguistic reading-books*, or lessons, where the peculiar terms used to define and illustrate the principles of our language and its construction and use should be objectively taught. But as these lessons will necessarily be more abstract and metaphysical than other lessons, they may be used in the more advanced stages of language training. Language is to be taught by the use of language.

Then, again, there should always be geographical reading lessons, in which geographical terms should be used in connection with the common words of life, accompanied with the best methods of illustration by the use of globes, models, and maps, to which reference has heretofore been made. There may be simple descriptions of bodies of water and land; and the history of places and countries, which may be observed in real or imaginative journeys, will afford abundant opportunities for learning geographical language, so that the pupils will easily understand the language of the complete text-book.

Again, there should be arithmetical reading lessons, prepared upon principles, to which reference has also been made heretofore, for the purpose of preparing the pupils to understand the language of the complete text-book.

There should also be provided specific elementary reading lessons in physiology and hygiene, in botany, history, etc., not so much for teaching these branches as for making pupils acquainted with their language.

It must be evident to every philosophical and practical teacher that these requisites enter largely into the educating forces of our schools, though they are not usually so recognized; but before the *new education* is fully realized, we shall have reading-books which will recognize the above principles. When the language of the text-books is mastered there will be ample time, opportunity, and preparation for all the supplementary reading which may be necessary.

In saying this, it is no part of my purpose to disparage the efforts, so much in vogue in many places, to magnify the importance of supplementary reading and of school and circulating libraries. *To read* library books and standard authors presupposes a knowledge of the meaning of

words, and, though the continued and repeated reading of authors may eventually result in the mastery of words, yet, until our children have, by *objective training*, become masters of a good vocabulary of their own, much time is wasted and little profit derived from reading standard authors. Trashy books and stories, designed for mental excitement, written in the lowest styles of language, will naturally be seized upon, because most easily comprehended; and consequently the *tastes* of our youth become perverted so that they do not relish that which is useful and profound. Hence the early training of children should be calculated to put them in possession of a useful vocabulary and teach them how to use it.

I cannot here point out and discuss what I believe to be the best methods of giving the first lessons in language training, though they are practically of the highest importance. Yet, if I have been fortunate enough, in what I have already said, to so impress your minds that you can see the subject in the same light which I do, I am sure the reading of this paper will lead to some good result, and eventually prove a god-send to our children, who are *wasting half their school lives* because the educating power of language is not fully appreciated.

The department adjourned at 5.30 P.M. to meet on Thursday at 3 P.M.

## SECOND SESSION.

The meeting was called to order at 3.20 P.M., in the Methodist Church by the President.

The minutes of the first session were read and approved.

The Committe on Nomination of Officers made the following report:

President, John H. Holcombe, Indiana.

Vice-President, L. R. Klemm, Ohio.

Secretary, Miss M. H. Sutherland, Ohio.

Assistant Secretary, Mrs. Eva D. Kellogg, North Carolina.

On motion the above-named officers were duly elected.

Professor Klemm, of Ohio, moved that the suggestion made by Mr. Sheldon in regard to the union of departments be referred to the Board of Directors with the sanction of this department. *Carried.*

A paper was read on:

## A NEW DEPARTURE IN TEACHING GEOGRAPHY.

BY L. R. KLEMM, PH.D., SUPERINTENDENT OF SCHOOLS, HAMILTON, OHIO.

PERMIT me to depart from the customary method of procedure, by starting from the general, and going down to the particular subject, by first directing attention to the fact, that in teaching young pupils we should invariably start from sense-perception ; from that the next step to conception and idea is easily taken, never *vice versa*. Show the child the particular, the concrete thing; show him several similar facts, and offer an opportunity to abstract from them, to rise from the object to the idea. Every subject of instruction in the lower schools has a certain elementary basis of sense-perception. The primary ideas resulting therefrom will be easily understood by the child, because, by means of his five senses he can take them in, retain, and assimilate them. If anything be taught lacking this sound basis, that is, anything the elements of which cannot be perceived by the senses, it has no business to be included in the course of study of the elementary schools ; it would, in fact, be like the proverbial bladeless knife that had no handle. In a measure this rule holds good in every branch of study, even in the most abstract philosophy.

A few simple examples may explain what is meant. (1) You may never see South America, yet you can obtain a tolerably accurate knowledge of the topography of that continent. And it is sense-perception by means of which you gain this knowledge. You know what is signified by such terms as, elevations and depressions, peaks and ridges, valleys and heights, plateaus and plains, coasts and banks, capes and inlets, rivers and lakes, bays and harbors, islands and peninsulas, llanos and pampas ; they are names of things the like of which have come under your own personal observation. And with the aid of illustrations your imaginative power may be fed sufficiently to obtain a pretty accurate idea of South America. (2) The artist who modeled the Venus of Milo may not have seen the original in reality, but his power of imagination was so great, that starting from what forms of beauty he had seen, he combined them, and thus created the graceful figure which to this day has remained the ideal of beauty. (3) No one ever saw the ideal, that is the absolutely perfect human being, of whom we all have a more or less definite idea. His eye must have the keenness of an eagle's eye ; his form must vie in beauty with that of Apollo Belvedere ; his strength must be superhuman : he

must be accomplished in all the arts ; be a Mozart in music, a Raphael in painting, a Demosthenes in elocution, etc.; he must be a thinker far beyond any philosopher of ancient or modern times ; in point of morals he must be as unblemished as the very stars above. Where is he to be found ? Yet he exists in our imagination, and he is a creation, every part of which has its origin in reality. (4) Take history : You were not present at the downfall of the Roman Republic ; yet from what is told you, and from what you have experienced yourself, you can form a vivid picture of the state of things at the time of Cæsar. And your knowledge of the events that happened 2000 years ago in Rome will be the more vivid, the clearer your ideas are of the political institutions of your own country.

Analogy and comparison are impossible, when there is nothing in your mind with which to compare. Not having a standard measure, how will you measure a distance ? Every iota of instruction, every idea, every rule must be based upon, or lead back to perceptions previously gained; and where these are wanting, they must be supplied. This is a condition of rational instruction *sine qua non.*

In the special subject under discussion in this paper the question arises: Have our pupils the necessary basis of sense-perception when they take up the study of geography, say in the third school year ? I think not ; and in the way in which geography is taught commonly, we do not even offer facilities for gaining sense-perception. Do not say: "Aye, but we do; for we start from the school-room, and gradually widen the horizon of observation." Despite this assertion, I repeat: The method in vogue is faulty, inasmuch as it fails to establish, first of all, a sound basis of sense-perception. The average teacher begins to build, before he knows upon what foundation he builds. To prove my assertion I could bring in evidence enough to convince even a jury composed of proverbial court-house rats. A few facts may suffice, however.

Out of 90 pupils in a grammar school in Hamburg, only 38 had seen the sun rise : only 8 had ever noticed the Milky Way. Out of 1,000 children, when entering the public schools of Berlin, only 638 had seen the evening red, only 462 the setting sun. Of 502 children that entered the schools of Plauen, Saxony, last year, only 92 had seen the sun rise, and 114 had seen the sun set. I am prepared to give many more instances of ignorance of common daily occurrences and facts, but my time is limited. You may be tempted to say: "These frightful examples of ignorance were found in Germany. God be thanked, they cannot be found in enlightened America." This is but poor consolation. I claim, these cases have been systematically enumerated in Germany, because there teaching is a profession, and people there are accustomed to treat educational questions with scientific thoroughness ; while in this country, as Hon. Henry Barnard, of Connecticut, says, "The business of

education is pursued with an utter lack of system, with complete, unsympathizing, independent, self-dependent isolation of effort." I am confident that our American children, if examined, would be found to exhibit the same deplorable want of information. Dr. Stanley Hall has proven this satisfactorily to all who are not prejudiced. My own experience during twenty years in the school-rooms of this country is in substance the same.

The greatest error, then, which prevails in the teaching of geography is the lack of preliminary steps. In every other branch of study, even the most inferior teacher proceeds somewhat rationally, but geography usually begins, I am sorry to say, with the introduction of the text-book.

Ritter, the father of modern geographical science, says: "The most natural method is the one which makes the child familiar with reality first, which lays a sound foundation of geographical knowledge gained through actual observation of that part of nature which surrounds the child. Here he is to learn to see. Whether he lives in the city, or in the hamlet, on the mountain, or in the valley, it is certainly not within the four walls, not from maps, and not from the text-book, but in nature alone, that knowledge of nature will be gained by him. Nature ever remains the same; she knows no typographical errors, no blunders in drawing, no want of discretion. Nature's teaching is always perfect. This elementary method combines all the requirements of science; it furnishes the stratum of concrete knowledge, from which abstract ideas are drawn. Amid nature, the child learns to know the country in all its various conditions, and learns to recognize it even on the flat-surfaced representation—the map. If this genuine elementary instruction be given, all difficulties of subsequent instruction in geography are removed."

I know I am not saying anything new. Other people have spoken of the necessity of laying the foundation correctly, but what I desire to do is, to show you how this can be done. During the summer I frequently take my children into parks and out into the country. Let me describe one of these excursions. One morning we started out due east, which direction was fixed by the rising sun. We roamed about till we found the source of a brooklet. Here I began my lesson on water-sheds, river-systems, etc. Here the children saw the very beginning of a water-course. They noticed the water trickling from beneath the roots of large trees till it increased enough in bulk and force to run along in the form of a creek. Here they learned by actual observation what a water-shed is, seeing one spring descend on the one side of a ridge, another on the opposite side. We then followed the brook, saw it grow deeper and wider by the influx of other springs. In following it we sometimes cut across the fields where certain curves in its course would have prolonged the excursion unnecessarily. Every curve, hill, and valley was carefully sketched on a slate as

we proceeded. When we reached the end of the brook we saw where it emptied into the tributary of a larger river. Ascending a hill, we could see the river meander through the country, could see that it was bridged over in the neighborhood of the city. And on this excursion we noticed hills, rocks, slopes, plateaus, woods, meadows, fields, plains, valleys, paths, highroads, railroads, farmhouses, and settlements. The observations were all carefully noted down on our slate, and the names were repeated, and thus fixed in the memory. The children learned to distinguish the different kinds of grain, many kinds of trees, certain minerals, birds, and insects; and thus we mingled a little natural history with our geographical lesson. At home we had a review lesson, which proved incontrovertibly that this kind of instruction is the most successful of all.

We may call this an ideal lesson in geography. Circumstances, as they prevail in our schools, make it next to impossible to follow this example. All things considered, however, I dare say, if a teacher of the third reader grade would take her pupils out of town, and take a position on the top of a hill, if there is any within reach, and then and there point out the different things to be seen,—I am sure the children would learn more real geography in one half-hour, than they could in a year from the printed page. Some cities are favorably situated for such instructive excursions; and if the school authorities were asked for permission I believe they would not refuse it.

If, however, this ideal instruction in geography be considered impracticable, we might substitute something in place of nature, something imitative of nature, by which to form that primary basis of sense-perception, without which instruction in geography will never have lasting results, something better than the flat-surfaced representation—the map. We can *make* the hills and the valleys, the capes and ridges, the plains and plateaus, the water-courses and water-sheds, by procuring a large baker's pan of galvanized sheet-iron, and with clay, sand, gravel, a few sticks and twigs and water we can mold mountains, hills, and show lakes, rivers, etc., and thus create a fancy representation which offers in a measure what nature itself offers. In this way, too, we can lay out a city or village, a whole State or continent in the rough. In short, by way of imitation, we can establish all the primary ideas desirable for a thorough comprehension of the subsequent instruction in geography. We must dismiss from our minds the erroneous idea that we may take for granted the existence of certain elementary ideas in our pupils. Rather presume too little than too much. Again I state that I am saying nothing new. I only intend to lead up to a point which will perhaps be new.

A large pan such as I have described ought to be furnished by the school authorities to every second and third reader grade. Then, when these preliminary steps to the study of geography have been taken, we may intro-

duce such relief maps as are now patented in this country. They show elevations and depressions and water-courses in superficial projection. They are made of *papier maché*, and will be covered with slating or other cleansable substances, adapted to receive obliterative marks, made with slate, or lead pencil, or crayon, and may be used as slates. These maps serve to bridge over the chasm between nature and the flat-surfaced representation —the ordinary map.

Let me submit to your earnest consideration these questions: Has not geographical knowledge, for ages, been wrested from overstocked maps? Had not the child to search painfully among a bewildering mass of data and facts for those that were to be committed to memory? Was not a systematic progress, step by step, impossible? Now, just as little as a teacher would give into the hands of a child a copy of Webster's *Unabridged* when he is to begin the study of reading, just as little can it be rational in geography to place before the child such a map. He must grade the matter of instruction in geography just as we grade the matter in reading, in arithmetic, and other branches. Relief maps of this kind would facilitate this grading, as well as present opportunity for the gradual upbuilding of a geographical knowledge, as gained item by item by the child. They can be made as cheap as common maps, and will therefore meet the formidable objection of cost, raised against relief maps heretofore. Upon these maps may be entered as upon a slate the data to be learned, and thus the child is made self-active; it learns by doing. When the lesson is completed, the marks and names entered upon it are carefully erased with a moist sponge, and we are ready for a new or for a review lesson.

And now we ascend to the higher grades, the fourth or fifth reader classes. Thus far, I understand, few teachers, if any, use a text-book in teaching geography. From this grade upward the text-book is used everywhere. I am not in sympathy with this. I cannot recommend any text-book that contains more than maps and illustrations. It should contain no text, should in fact be no text-book, but an atlas, pure and simple. Why? I shall state further on. And as to the wall-maps, I have my serious doubts as to their usefulness in their present condition. A wall-map to be used in the fourth or fifth reader grade should have recorded upon it nothing but what belongs by right to a picture or representation of nature, and therefore it should contain no lettering, no names. Permit me to present to your consideration a map which I made for my own children. I procured from Mr. Lyon of Oberlin, O., a portable blackboard, drew the map by means of the pentagraph, and colored the water-courses pale blue. In order to make it less destructible I gave it a waterproof, cleansable surface. Let me show you how the map may be used. It contains, as you will notice, only the outlines of the continent, exhibiting *terra firma* in black, oceans, lakes and water-courses in blue, and no names whatever.

The teacher, pointer and colored crayon in hand, pointing to the sources of two rivers that run in almost opposite directions, draws out by a few leading questions, that here must be a water-shed. Children who have been taught as I indicated at the beginning of my discourse, are able to thus reason from effect back to cause. Knowing that water seeks its level, they will with great decision and accuracy fix upon the map all important water-sheds of the country. These are marked with crayon by the teacher himself, or by pupils under his direction. By degrees, the map is stocked with all the elevations to be learned. This takes very little time, and has the great advantage of concentrating the pupils' attention. Every name thus learned, both of mountains and rivers, is written on the board; the name of the main river in the middle, below it on the left its left tributaries, on the right its right tributaries. These names are left on the board a few days. They are spelled and copied. The names of elevations thus learned are grouped and treated likewise. The coastline, islands, capes, inlets, peninsulas, etc., are pointed out, marked with crayon, and named. Thus crayon and pointer are ever kept busy in bringing out new points. The coastline and general configuration of the continent may be taken for one lesson, the rivers for another, and so on. After the lesson is over, all marks are erased, and now the pupils are called upon to mark points themselves and thus learn by doing.

Thus we may suppose topographical facts of the most vital importance to have been learned. In a subsequent lesson a little green crayon dust, laid on with the fingertip, may indicate fertile valleys, white dots or lines snow-covered mountain ranges or peaks; various depths of the sea and other things may be marked, and the topography is disposed of. Now political boundaries are marked. So, for instance, a State is "cut out" by white or colored crayon, canals and trunk-roads are entered upon the map; and I need not say that the location of cities forms a most valuable and entertaining lesson.

The fact that whatever geographical data are spread upon the map may be easily and safely removed without the least injury to body or surface of the map, gives an opportunity for the pupils to be self-active, and these "practice maps" are therefore a most welcome medium of instruction. They are also distinguished from others now in use, by containing no lettering, and therefore present a more perfect image of the country portrayed. The names on a map used by children are like ponies and keyes in arithmetic, and only disfigure the map and confuse the mental picture. These "practice maps" do not displace the ordinary printed maps, so long as our teachers are not omniscient. When the pupils have thus learned geography by degrees it is well to permit them to consult liberally stocked maps. Primer and reading charts naturally precede the dictionary or complete works of authors.

To give due honor to truth we all labor more or less under the delusion that a map is *good* when it contains *much*, that it is poor when it contains little. In the common sense of the term the word good is not misapplied. The map of a military leader must contain every turnpike, path, hamlet, brook, creek, bridge, marsh, grove, hill, etc., if it is to be a good map. A commercial map, if it comes up to the merchant's idea, must contain all the information of value to him. I need not enumerate these things. The geometer again has a different standard of value. And so have we ours. A map for the school-room should contain what the children are to learn, certainly very little, if aught, more. To give into the hands of children, or hang up for use, an overstocked map, is like giving the children a lexicon instead of a reader. In teaching literature we give them selections and objects to complete works of authors. In history we use mere skeletons of data and facts, and supply the remainder by word of mouth. In every branch of study we leave the limits of the matter of instruction to the discretion of the teacher. Why not do so in geography? Why should we put up with overloaded maps?

I have asked the question elsewhere, and the timid answer came: "We have to take what the publishers offer us." I do not believe this. The publishers are merchants. The steady force of the law of supply and demand, and the sleepless instinct of gain determines what they should offer for sale. If such maps as these "practice maps" were wanted by a great number of teachers you may depend upon it they would soon make their appearance in due season. No, the fault lies with the teachers, and with the unnatural and irrational method of teaching in vogue all over the country; it lies with the school authorities, who in many cases labor under the common error that the more a map contains the more perfect it must be.

Sensible teachers have helped themselves by resorting to the blackboard. They sketched or drew the outlines of the map, traced the watercourses with blue crayon, and then proceeded as indicated before, that is, spread upon the map by degrees all information of value, until the pupils' knowledge was extended enough, and their comprehension developed enough to make sensible use of printed maps. But I have noticed in these cases a great waste of time, much unavoidable inaccuracy on the part of the teacher, and many misconceptions on the part of the pupils.

I have little to say upon the subject as far as it concerns the upper grade of the grammar school and the high school. These maps may be used which are liberally furnished with information, provided rational instruction has preceded in the lower schools. Teachers of higher grades have just cause for complaint. Their pupils have not acquired a knowledge of geography as they should have done. The memory (evidently the faculty upon which we have to relie most in teaching geography), re-

tains willingly only that which has gone through reason and understanding. Whatever the mind does not grasp is difficult to remember. Not everything to be learned can be understood, however; still we may make it palatable and digestible by connecting with it incidents of interest. So, for instance, a child who hears the laughable story which led to the naming of Cape Finisterre, and the trivial reason for the naming of Cape Cod, or Cape Farewell, or Cape Verd, etc., will not easily forget these names. All this is so self-evident that I feel as if I paid small compliments to you by repeating it. But I do it to point out the utter absurdity of learning geography from the printed text. Here are a few tidbits of information as found in some geographies: "Zenith and Nadir are two Arabic words importing their own signification." (How lucid!) "Land is either level or diversified by elevations and depressions." (How wonderfully clear to children this must be!) "Commerce consists in the exchange of commodities." (Is it possible?) "North America, lying in three zones, and traversed by lofty mountain ranges, is marked by astounding varieties of climate and productions." (Will not this cause mental dyspepsia?) "Extensive forests of deciduous trees cover this section." "Indian mounds of an unknown antiquity are found in Georgia." Verily, we cannot thank kind Providence enough for having gifted the human memory with the happy faculty of throwing off what has not gone through the mill of reason and understanding. What a frightful waste of energy is there in schools where such unpalatable and indigestible matter is set before the pupils who are told to "study" their geography lesson.

I cannot refrain from quoting Goethe; the temptation is too great. We find in *Goetz von Berlichingen* the following conversation. Goetz, Lord of Faxthausen, returns home and meets his son Carl. *Carl:* "Good-morning, father!" *Goetz* (kisses him): "Good-morning, boy; how have you all spent your time?" *Carl:* "Well, good father! Auntie says I was right good." *Goetz:* "Indeed?" *Carl:* "I have learned a great deal." *Goetz:* "Indeed?" *Carl:* "Shall I tell you the story of the good boy?" *Goetz:* "After dinner, not now." *Carl:* "I know something else." *Goetz:* "What may that be?" *Carl:* "Faxthausen is the name of a village and castle on the River Faxt, belonging to the Lord of Berlichingen, for the last two hundred years." *Goetz:* "Do you know the Lord of Berlichingen?" (Carl looks at him in mute astonishment.) *Goetz* (aside): "The boy has become so learned that he does not know his own father. (To the boy): "To whom does Faxthausen belong?" *Carl* (Reciting): "Faxthausen is the name of a village and castle on the River Faxt. . . . " *Goetz:* "I did not ask for that. (Aside.) I knew all the paths, roads, and fords before I knew the name of river, castle, and village."

Now I do not mean to accuse the teachers of to-day of teaching with

such results as Goethe here describes it to have been done in the Middle Ages, but I mean to state that we are constantly subjected to the temptation to thus teach geography as long as we have text-books. What can a teacher mean when assigning a lesson in such a book? What else than to commit verbally to memory such and such a page. That this is literally true, is seen the next day, when he "hears his classes." He conducts recitations. What is a recitation? Webster and Worcester says: "A recitation is a repetition of something committed to memory."

Now I certainly do not denounce recitations in geography, or in any other study, for I want my pupils to frequently repeat what they have learned, but I expect and require them to do it in their own words. A definition wrought out in the mind of the child by his own self-activity, even if it do not cover the entirety of the subject, is vastly better than one committed from the printed page.

To sum up: The ideal method in the lower grades, of course, is to let the children make the acquaintance of Mother Nature herself. That being out of the question in many cases, we can imitate her, and mold those objects which will give the primary notions and ideas absolutely necessary for the subsequent abstract instruction. When these primary ideas are well established, when the child has become acquainted with the position of the school-house, yard, and neighborhood, with the cardinal points, with the city and its vicinity, with the river or the lake, as the case may be, when he has gained some definite ideas of distance, when he is able to comprehend the relation between reality and its representation, then such "practice maps" as I have described, both relief and flat-surfaced maps, and in absence of these the blackboard may be used. We must remember that "a good teacher is known from the intensity of attention with which the pupils follow his instruction, and from the amount of crayon he uses." And as to text-books, let them be atlases, containing no text whatever. The maps should be elementary maps, not overstocked with data and lettering of all kinds tending to blur the child's image of the respective country or section. Let these maps be accompanied by illustrations of cities, landscapes, vegetable productions, animals, modes of communications and occupations, buildings, etc., etc. *But do away with the terrible temptation to make the pupils thoughtless prattlers.*

The last paper was read on:

# THE AVENUES TO THE MIND.

BY WILLIAM M. GIFFIN, NEWARK, N. J.

"It is to me a perpetual wonder that any child's love of knowledge survives the outrages of the school-room."

"That man will be a benefactor of his race who shall teach us how to manage rightly the first years of a child's education."

"The student should first study what he needs most to know; the order of his needs should be the order of his work."

These words, my fellow-teachers, are not my own, they are the words of one of the noblest and best men (take him all in all) that our country has ever known, James A. Garfield.

Although my subject is "The Avenues to the Mind," I shall first tell you what I know about numbers, which will gradually lead me to the subject proper.

No one, I think, has ever made more fool-hardy mistakes in teaching this subject of numbers than I. Now that I have grown wiser, and therefore better, I thought it no more than right that I confess the fact to the world.

I well remember, that at about the time I began to get my eyes open, and to feel, and know my faults, I attended one of our county institutes. There they had what they called a query-box, in which any one who saw fit might place written questions, which, when the box was opened, were to be read, and some one was to be called on to answer them. On this day one of the questions asked was: "Why is it that the pupils who enter our grammar grades have such a poor knowledge of the fundamental rules of arithmetic?" I did not give it much attention, thinking, perhaps, it had been asked by some teacher who had just taken a newly promoted class, and, as usual on such occasions, was fully convinced that not one of them was fit for her grade. When a well-known sound fell upon my ears, being that of my name, and when I came to my full senses, I realized that I was being called upon to answer the question. I was as bad off as Buck Fanshaw, when talking to the parson, and felt like getting up then and there, and saying, "I pass, Pard, you're too many for me this hand." I, however, kept my seat, and again, like Fanshaw, I repeated the question and "said it slow." It set me to thinking, and I have been thinking ever since, and to-day I ask you why is it?

Surely our primary children know how to read, write, and count num-

bers, all the way from *one* to *one billion*. A good thing, by the way, to know ; so useful in after life.

Why, if they ever have a billion gold dollars in a pile, and begin counting them one hundred a minute, eight hours a day, they will have them all counted in a little over sixty years. And then, again, you know, it is expected that all of our boys and girls will become either temperance lecturers or political speakers, and hence it will be absolutely necessary for them to know all about these combinations.

Please notice that I do not say comprehend them, but simply know, and seriously, my friends, this is the point I make. Just as long as we keep within the comprehension of a child, we teach him ; the moment we get beyond his comprehension, that moment we cease to teach him. We simply fill his mind with an abundance of meaningless trash.

Because a child knows his counting-tables thoroughly, and can repeat them as rapidly as he is able to talk, we must not think that he comprehends them.

Thousands of children know their tables thoroughly, and yet have no idea that three twos make six, or that two twos make four.

They simply learn their story by heart, and repeat it as a parrot would, and if you interrupt, or throw them off the track, they, like Mark Twain's "European Guides," have to go back and begin all over again.

I have heard scores of children counting by twos or threes to one hundred who, if interrupted at any point, and told to continue at that point, by threes or twos, fail utterly to do so, and yet they knew their tables, and could read and write numbers large enough to make an ordinary mind dizzy. They have simply learned them by heart, just as they would learn a little verse in poetry. Any child can commit to memory "Thanatopsis" or "Paradise Lost." It requires a master mind to comprehend either.

It is much easier to teach a child by rote, that is, to cram the memory than to train and develop the reason. Consequently, those teachers who are not possessed with a requisite amount of enthusiasm, cry down the so-called new methods and cling to the old.

I say the *so-called* new methods, because the same ideas were advanced by Horace, who lived sixty-five years B.C.

Dr. John Hall says : "There can hardly be conceived a life of more drudgery than that of a teacher, who goes through a dull, monotonous routine every day, attempting to instruct and not knowing how. But if the teacher will study the mind he is shaping, his calling must prove to him the most interesting and fascinating possible to have. Unless one understands these laws, he will be apt to overestimate the value of the memory. The capacity to crowd the mind is not the capacity to educate. A man may remember much, and not be educated. The organization of

the mind must be worked upon by that of the teacher, until that of the pupil is not only able to retain the matter, but to turn it over, see it in more than one aspect, and reproduce it in more than one form."

Fellow-teachers, arithmetic is a science, and when taught as such, the teacher finds he has work before him—hard, earnest, thorough work. He has now something more than the memory with which to deal. Reason, that wonderful faculty of the human mind, that faculty by which man is distinguished from the brute, comes into play. No mental process is more important than that of reasoning. "Reasoning," says Dr. Alden, "is an act of the mind. In considering this subject, let us forget, for the time being, the existence of faculties; let us ignore the existence of Reason, and Judgment, and Comparison, and the like personages, and confine our attention to the successive mental acts which constitute the process of reasoning. We will not find it to be so obscure and complicated a matter as it is commonly supposed to be."

"It is the mind which reasons, just as it is the mind which cognizes external objects and remembers. Reasoning is a cognizing act of the mind. We cognize by reasoning truths which were unknown to us before. Reasoning, then, is the mental process of cognizing unknown truths, by means of those that are known."

My little four-year-old boy, then, who the other day saw some fresh ashes in the road, and told me there had been a bonfire there, cognized this truth by a course of reasoning. He had seen bonfires burning in the street. He had seen that when the fire burned out it left a pile of ashes. From these known truths he drew his conclusion.

A child can be easily taught to reason by a skillful teacher, but those teachers who try to develop this faculty in the same manner they develop the memory, invariably make a failure. They begin the cramming process and reason refuses to be crammed. Then they either find fault with the method or the child, and become disheartened, discouraged, and conclude the child is a dunce, not worth the time it may take to teach him.

> "Oh! woe to them who trample on the mind,
> That deathless thing;
> They know not what they do nor what they deal with.
> Man perchance may bind the flower his foot has crushed,
> But as for the soul, oh! tremble and beware
> To lay rude hands on God's mysteries there."

That a child cannot see a truth that is imparted to him, by some one method, is not a certainty that he is dull or that he cannot be taught. For, as the poet says:

> "Are pupils all the same?
> Do various minds not various methods claim?

Pearls are not always found upon the shore,
And gold is oft extracted from the ore;
And he who gems from terra would procure,
Must not expect to find them bright and pure.
What different methods, too, the gold assay,
And diamonds' lustre to your gaze display!
Thus should the teacher on each different boy,
A different method patiently employ;
Minds he should know; from different methods choose
That which is proper, and with patience use.
Then might he see and hail without surprise,
The stupid boy becoming learned and wise.
'Tis they whose 'art with all is just the same'
More often than their pupils are to blame.
Revolve this thought in your pedantic skull:
'The pupil, through the teacher, oft is dull.'"

True, there is really but one way to proceed when dealing with the memory. There are many ways to reach the understanding.

The five senses are the five grand avenues leading to the grand central station, the mind. We, as teachers, often use but one, and think all of the others are of no importance.

Many teachers appeal to the hearing, and, if unsuccessful, think that nothing remains for them to do. And those who desire to be through and through "Quincyites," but who really do not have a full understanding of those methods, appeal to the sight and there stop.

But, my friends, your work as teachers does not end here. You must give all a chance. In some children one of the senses may be very acute, while all the others are more or less dormant. Your duty, then, as teachers, is to discover which sense is the most acute, and deal with that until the understanding is reached.

You have all heard of Laura Bridgman. God bless the teachers who taught her! Thus setting an example to all teachers who follow them.

Here was a child only eight years old, with no *sight*, no *hearing*, no, or scarcely no sense of taste, and unable to *smell*.

How was her understanding to be reached? But a few years ago, such a being was looked upon in law as an idiot. It was so laid down by Blackstone, one of the ablest lawyers that ever held a pen. But thank the Good Father of us all, this most diabolical theory has been forever blotted from our statute books.

The first lessons given to her are thus described by Mrs. Lamson, the author of her *Life:* "When I had been with her a few days and she had become accustomed to being led by me, I took her one morning to the nursery; and having seated her by the table, Dr. Howe and myself commenced her first lesson. First, we gave her the word, knife, on the slip of paper, and moved her fingers over it, as the blind do in reading. Then

we showed her the knife and let her put the label upon it, and made to her the sign which she was accustomed to use to signify likeness, viz. : placing side by side the forefingers of each hand. She readily perceived the similarity of the two words. The same process was repeated with other objects. I desire to call your attention to the following facts : Her teachers took care in selecting the words at first that they should be as short as possible, and more important in my judgment, as I know a child can be taught elephant nearly if not quite as readily as cat, care was taken that no two words should contain the same letters ; that is, after *knife* was taught, *box* was taken."

If this were important with a child who could be misled by only one sense, is it not more important to a child who has more than one to mislead him?

This explains to me why it is that teachers have so much trouble in teaching *cat* and *rat*, *fox* and *box*, *man* and *can* in the same lessons ; both the form and sound mislead the child. I have had primary teachers ask me if they might be excused from teaching *am* and *an* in the order of the book or chart, as they said the children were so apt to confuse them.

If a child is taught the word BOY and when he has learned that, is then taught the word GIRL, a word in no respect like the first, will he not learn and retain it better than he will if he be taught BOY and then TOY, or some other word similar in form and sound ?

Another important fact (p. 175 of her *Life*) was, that all new words were used constantly in conversation with her, in order that she might learn their *exact* meaning. Thus doing away with the too common method of teaching the *word* and its definition. Like the boy who looked up the meaning of the word *frantic*, which he found to be *wild* and when called upon to use the word in a sentence, wrote : "I picked a bouquet of frantic flowers."

I learned another fact when reading her *Life*, or rather it called to my mind a fact too often forgotten. I refer to the thoughtless use of words, taking care not to use a word till we know the child understands it. A gentleman, calling at the school one day, said he had a little boy at home who was deaf and dumb. The teacher repeated it to Laura thus : "Man has little boy *who* cannot see and hear." Laura then wrote : "I am sorry *who* cannot see and hear. I am deaf and blind."

When reading her *Life*, I was surprised when I read how they began the subject of arithmetic, which was, as you and I were taught, by counting, reading and writing numbers way beyond what she could possibly comprehend.

Had they used as good judgment in beginning this subject, as they did in all the others, she would have done just as well as in the others. They

began talking to her about thousands, and on July 20 she had her first lesson in arithmetic, and in three weeks or less had her adding columns the sum of which being as high as thirty. On p. 173 of her *Life*, however, I was not surprised to read the following : "She has forgotton more in her arithmetic than in anything else. She also enjoys this study less than any other." As Tennyson's old Northern farmers would say, "REASON WHY."

Her first lessons in geography were all given in the same way all progressive teachers begin ; local geography first, teaching points of compass, etc. From the known to the unknown, from the whole to the part, and definitions in the order of their use.

But enough of this. Suffice it to say she was taught, and successfully taught, and one should never see a dull child without thinking of those noble men and women, the very thought of whom should stimulate him with a determination to succeed.

Think of her who had neither the sense of hearing, smelling, tasting nor sight; nothing but the sense of feeling, and yet, to-day, she is a woman of more than ordinary intelligence.

Dare we any of us, then, who have the five senses with which to work, dare we assert that there is a child under our charge whose understanding we cannot reach?

Oh ! do not forget my friends, "'Tis the mind that makes the body rich."

"Whatever that be which thinks, which understands, which wills, which acts, it is something celestial and divine, and, upon that account, must necessarily be eternal."

Let us not forget, then, when we return to our school-rooms, that it is our privilege to deal with mind, immortal mind; that which is everlasting and indestructible.

"Remember 'tis no common task
That thus to thee is given
To rear a spirit fit to be
The habitant of heaven."

Let not one, then, that may come under your charge remain undeveloped. *Reach them all.*

And if you have not been in the habit of appealing to the different senses, or avenues to the mind, never in the future think your duty done until all, or as many as are necessary, have been appealed to, reach the understanding.

To illustrate: Not long ago I had the pleasure of talking to the teachers of East New York. During my talk, I told them of a lady who had been teaching a class number lessons. We had just begun to use the Grube

Method. She complained that she could not make the children understand, and thought the old method so much easier. I asked her to conduct the lesson, and at once discovered wherein she was faulty. She was teaching all alike. I took the class and soon found which were the bright pupils, and these I separated from the dull ones. Taking the dull pupils by themselves I began teaching them the number three. I showed them three fingers, three boys, three girls, three blocks, etc. ; then asked them to rap three times on the table thus (. · .) . Some of them rapped three, some four, some half a dozen. I went all over the work again, and again tried. This time some seemed to understand. I tried again, no success ; again, no success. I then told them to listen. I whistled three times, clapped my hands three times, thus appealing to the sense of hearing. I captured most of them, but not all. I took one little fellow, and holding up his hand, I touched it three times ; a moment after I touched his cheek three times. Glorious ! I had conquered !

Now all the class were told to rap three times, and while they were rapping, I was keeping my hands in motion, but I did not confuse them, they had learned *three* and when they rapped three they stopped.

I said to the teachers in New York that had I failed in the last trial, I should have asked the little fellow to stick out his tongue, and should have touched that (it being more sensitive to touch). There was a smile all over the room. I then gave an exercise with some half-dozen children, with about the same result I had had in my own school.

When I dismissed the children, it was with a feeling of triumph, but alas ! I did not enjoy it long, for in a moment in walked a gentleman with a boy who showed in every feature a lack of mental power.

Bringing him to the table, the gentleman said, loud enough to be heard all over the room, " Professor " (that was enough to frighten me to begin with), " see what you can do with this boy." I began the task, first making a point to become acquainted with the little fellow, talking to him about dogs, cats, hens, etc., and when I felt I had his confidence, I began the work, going through all I have already described, but with no success. Oh ! how warm it was ! The perspiration was oozing out of every pore, and when about to give up in despair, I thought of his tongue. A happy thought. " Here, my little fellow," said I, " I want you to stick out your tongue, now rap so many times." Do you believe it ? I had him. If you do not believe it, I am happy to say that I have that whole audience as living witnesses. I tried to confuse him, but no, sir, he would rap the table three times and then stop.

He not only *knew* three, *but he comprehended it.*

Now, my friends, please attend. I did not scold him when he did not get it the first time ; because I had no desire to make him *fear* me. I did not tell him he was dull and hard to learn no matter how much I may

have thought so; because I had no desire to make him *hate* me. I did not get out of patience with him; because I desired him *to be patient.* I did not laugh at him; because I had no desire to *wound his feelings.*

Too many children never accomplish anything because they fear both their parents and teachers.

Too many never succeed because they are made to feel they never can.

Many a child who is running over with animation, full of life, and fun, and happiness, is made to fairly hate his school and school-books, because his teacher does not take the time or trouble to study his disposition and thus learn how to govern him.

"He who checks a child with terror,
Stops its play, and stills its song,
Not alone commits an error,
But a great and moral wrong.

"Give it play, and never fear it,
*Active life is no defect;*
Never, never *break* its spirit,
*Curb* it only to direct.

"Would you stop the flowing river,
Thinking it would cease to flow?
Onward it must flow for ever,
Better teach it *where* to go."

What credit is due a teacher who graduates a bright, intelligent boy with a high standing?

Scarcely any. Such a boy will learn if shut up in a room by himself; though you bind him hand and foot, yet will he gain knowledge. The teacher who deserves credit is he who awakens the sleepy mind. He who reaches that which all others have failed to reach. He it is that, like the sculptor who had finished his masterpiece, may clasp his hands and with joy exclaim: "This is *my* handiwork!"

There are many streets that lead to all grand avenues, and patience, courage, love, faith, sympathy, self-control, enthusiasm, and common-sense are the streets that lead the successful teacher to the avenues of the minds of her pupils, which, in their turn, lead to the soul. And those teachers who do not travel them all will be failures.

Hundreds and hundreds of teachers will go to their school-rooms, at the beginning of next term, who are no more fit for the work in which they are engaged than a snail for rapid transit. As has been aptly said: "Every stripling who has passed four years within the walls of a college; every dissatisfied clerk who has not ability enough to manage the trifling concerns of a common retail shop; every young farmer who obtains in the winter a short vacation from the toils of summer,—in short, every young person

who is conscious of his *imbecility* in other businesses, esteems himself fully competent to train the ignorance and weakness of infancy into all the virtue and power and wisdom of mature years,—to form a creature, the frailest and feeblest that Heaven has made, into the intelligent and fearless sovereign of the whole animated creation, the interpreter and adorer and almost the representative of Divinity!" Do not for a moment think that these remarks apply to all who are engaged in teaching. If there are hundreds upon hundreds like those just described, there are hundreds upon hundreds of hard-working, untiring, conscientious, progressive, enthusiastic teachers, who never *have* received, and who must never hope *to* receive their full reward in this world. *Such teachers are worth their weight in gold.*

And yet there are boards of education and trustees that will stand and quibble over five dollars a month as between such a teacher and an inferior one, and it gives me unbounded pleasure that I am able to stand before you, to-day, and repeat in most emphatic terms, that no such trustees are found in the metropolis of New Jersey.

Too often, to our shame be it said, are the kindly words of praise and encouragement withheld from those faithful teachers, until it is too late, and the first we hear or know of their untiring devotion to the cause, is when we read of it in a long-drawn set of resolutions, after they have passed to that better and brighter world.

"If I should die to-night,
My friends would call to mind with loving thought,
Some kindly deed the icy hand had wrought;
Some gentle word the frozen lips had said;
Errands on which the willing feet had sped;
The memory of my selfishness and pride,
My hasty words would all be put aside.
And so I should be loved and mourned to-night."

"Oh! friends, I pray to-night,
Keep not your words for my dead cold brow;
The way is lonely, let me hear them now.
Think gently of me; I am travel-worn;
My faltering feet are pierced with many a thorn.
Speak, oh, speak to-night, I plead!
When dreamless rest is mine, I shall not need
The kindly words for which I long to-night."

But never mind; some one has beautifully said, "The road is not very long, the gates are in sight." The time is coming when every stripe shall be a golden band; every ache here will be a joy over there. Every wound on the heart will be a fragrant bouquet, when every neglect to which the patient pilgrim was assigned in earth-life, will be a radiance of glory in the life to come.

Courage! faithful workers. You may not have been understood. Have been worked beyond your strength. Have been called to give, oh, so often! when you should have received.

The seed planted in prayer and good works will blossom in paradise. All will yet be well. Forgive those who are not good to you, and in so doing be good to *yourself*. You may have needed encouragement more than you have received. You may have borne many a burden to others unknown.

We believe that very soon will come a time, when we shall none of us grow weary and care-worn, but better and better and more tender of heart, as we rest in the garden of God, just beyond our soon-coming, final *Friday Night*.

Mr. McAllister, of Pennsylvania, said the main thing in primary work was to keep close to things. The great business of a primary teacher is to know the child and deal with it as a child. The avenue to a child's mind is through the heart of the child.

Mr. Brown of Ohio: The best elementary schools of the country have the spirit of the kindergarten in them.

Mr. Richards of Washington, D. C., remarked he considered it sublimated nonsense to spend one whole year to learn numbers up to 10.

The paper was further discussed by Mrs. Heath, Boston, Mass., Mr. Peaslee, Cincinnati, O., Mr. Beattie, Troy, N. Y., and Mr. Clark, Newark, N. J.

On motion the meeting adjourned.

E. CALKINS,
*Secretary.*

# KINDERGARTEN INSTRUCTION.

KINDERGARTEN DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION.

SARATOGA, *July* 15, 1885.

The meeting was called to order in the High School auditorium, at 3 P. M., by the President, W. N. Hailmann, Indiana.

Mrs. Edina D. Worden of Cincinnati, Ohio, was appointed Acting Secretary.

## *PRESIDENT HAILMANN'S ADDRESS.*

WE have the honor and the pleasure of opening to-day the first session of the Kindergarten Department of the National Educational Association. It behooves us, therefore, to bring before our minds in more or less definite formula the purpose of the Department, to survey our means for the accomplishment of this purpose, and to map out in a general way a plan of operation.

As I understand the spirit that animated the friends who petitioned for the creation of this Department, their aim was not so much to foster and develop the kindergarten as such, as it was to secure a thorough testing and sifting of kindergarten principles and methods, and to devise ways and means for a full and generous application of what might be found valuable and available in the educational work of the school. The efficiency of the kindergarten in the unfolding and filling of child-life in its earlier stages have been brought to the notice of the petitioners so unmistakably, that they yearned to secure for the school the powerful and beneficent influences involved.

The chief problems which they hoped the Kindergarten Department might solve are :

(1.) What are the principles and methods by which the kindergarten arouses even in little children so deep, broad, and generous an interest in life and the things of life ? How does the kindergarten at so early a period in child-life secure that thoughtful mastery of self and surroundings which is the root of character and of efficiency in life ? How does it secure that rounded "complete living," which neglects no faculty, strains no faculty, does violence to no faculty, but leads them all into a healthy, joyous, growing activity that makes life consciously worth living at every step ?

(2.) To what extent do these principles and methods apply to the period

of school-life? What modifications are needed in the aims and ways of school-life to make it a continuation of the happy, vigorous, soul-and-body-growing so auspiciously begun in the kindergarten?

It is evident that the solution of these problems implies a wide range of inquiry. It will not be enough to examine the existing status of the kindergarten and primary school and to gear these two wheels into each other. So superficial a proceeding might lead us astray, and our labors might raise only new hindrances to the development of childhood and of educational practice. There is much to warn us against such narrowness in the condition of kindergartens that work only for the moment, and do not look beyond the short span of child-life with which they have to deal; and more yet in the failures of many primary schools that have insulted the memory of Froebel and vitiated their own work by the introduction of some kindergarten occupations, as "busy work." Putting on the grin of kindness does not make us lovers of children, neither does the random play with sticks and straws transform the school into a paradise of childhood.

If we would do our task acceptably and place our work in the trend of progress, we should inquire into the history and laws of child-growth, as well as the history and laws of the development of humanity; we should work in the full light of the errors and successes of educational work in all times and places; our work should be in conscious harmony with that of the thoughtful mother who has strengthened her love with insight, as well as with the high school or university that has lifted its feet out of the mire of the Middle Ages; we should emancipate ourselves from the kindergarten manual with its sleepy crudities and delusive sequences, and lift ourselves upon the broad platform of science and art, and fill our hearts with widest love and deepest faith.

That under these circumstances it must be impossible for me to map out a detailed outline of our work in its present initial stage, needs no statement. I have no doubt, however, that earnestness, a deep appreciation of the magnitude of our task, and a modest use of our united powers will lead us to our end.

Mrs. Elizabeth P. Bond, of Florence, Massachusetts, then read a paper on the "Kindergarten in the Mother's work."

She considered the scope of the mother's work as creator, preserver, and guide, and the unity which should exist between mother and kindergartener.

She emphasized the importance of molding the future citizen while yet in infancy.

The subject was discussed by Miss Ruth Burritt, of Philadelphia; Miss Dickey, of Utah; and President Hailmann, of Indiana.

The following Committee on Nomination was appointed:

Miss Low of Pennsylvania.

J. M. B. Sill, Michigan.

Miss Amy B. Fisk, Vermont.

The meeting adjourned to meet July 16th, 3 P.M.

## SECOND SESSION.

THURSDAY, *July* 16.

The second session of the Kindergarten Department convened in the High School auditorium at 3 P.M., President W. N. Hailmann in the chair.

Dr. J. W. Dickinson, of Massachusetts, being unable to be present, by request, Albert G. Boyden, of Massachusetts, read his paper on "The Relation of the Kindergarten to the Primary School." The paper showed what a primary school could be made when imbued with kindergarten principles.

All heartily indorsed the contents of the paper.

Hon. John Hitz, of Washington, desired those who had combined kindergarten instruction with primary school work to state their experience.

The subject was discussed by Miss Dickey, of Utah; Professor Boyden, of Massachusetts; Mrs. Seaman, of Louisiana; and Mrs. Alden, of Providence, R. I.

Dr. Mayo thought the present arrangement of the school-rooms an obstacle to introducing kindergarten training into primary schools; they should be less like a school, more like a home.

Mrs. Eudora Hailmann read a paper on "Some Essentials of the Kindergarten." She emphasized the following points:

The thoughtful regard for the time element in growth, the reverent use of music, and a truthful, simple spirit of oneness between the child and the kindergartener.

The question "How can the spirit of the kindergarten be used in rural schools with no inconvenience?" was next discussed by many members of the Department.

Dr. Mayo proposed that Mrs. Bond, of Massachusetts, and Mr. Bradley, of Massachusetts, should be appointed a committee to inquire into this important question; and report at the next annual meeting.

The meeting heartily indorsed Dr. Mayo's proposition, but left the carrying out of the proposition to the chair.

The Committee on Nominations submitted the following list of officers for the ensuing year. The Secretary was authorized to cast the vote.

President, W. N. Hailmann, La Porte, Indiana.

Vice-President, J. W. Dickinson, Boston, Mass.

Secretary, Miss S. A. Van Note, La Porte, Indiana.

The meeting adjourned at 5 P.M.

EDINA D. WORDEN,
*Acting Secretary.*

## THE KINDERGARTEN IN THE MOTHER'S WORK.

BY MRS. ELIZABETH POWELL BOND, FLORENCE, MASS.

"THE Lord cannot be everywhere, so he made mothers."

This statement, attributed to a Jewish rabbi, although it be a poetic rather than a scientific statement, conveys to us the scope of the mother's calling. She stands, in very truth, the handmaid of the Lord, called to his holy of holies, to work out his law of creation. Alas! that this most holy office should ever be degraded. Alas! that the ignorance and thoughtlessness of the world, should rob this sacred service of its sanctity, and make it to be held of less account than the harvest of grain, or the return from the orchard and vineyard.

A thoughtful woman once said to me: "I wonder that any woman dares to become a mother—that she dares to think that her child will thank her for the gift of life." It is a fearful responsibility, indeed, to create another being who must *accept* life, with all its limitations and possibilities, its weeping and its gladness, its failures and its successes. The woman may well pause, "where angels would fear to tread!" To dwell upon the responsibility alone, would preclude motherhood. But since she is appointed of the Lord, to stand in his creative place, this law of her being asserts itself above the crushing sense of responsibilily; and love and hope and faith find fruition in her child.

In Longfellow's noble drama, Michael Angelo says:

> . . . "in every block of marble
> I see a statue,—see it as distinctly
> As if it stood before me shaped and perfect
> In attitude and action. I have only
> To hew away the stone walls that imprison
> The lovely apparition, and reveal it
> To other eyes as mine already see it."

Very different from the creative work of the sculptor, is that of the mother. The beautiful, passive marble stands before him absolutely subject to his strokes. He may carve to-day a rude outline of the "lovely apparition," and then may turn away for months and years, and still the unfinished statue waits patiently the return of his shaping hand, of the unerring mallet that shall transform it from the block of stone to the almost animate image of a god. The expectant mother, having placed

her own life in the balance, receives into her arms her tiny babe. More helpless it is, this miniature man or woman, than the young creatures whose bodies bound their needs and capabilities, but passive like marble it never is! The very elements of marble she could lay bare before her. But in her arms is this living, breathing statuette whose being is all a mystery to her, and which she has yet undertaken to work upon as the sculptor works upon his clay. The fashioning hand of law has already touched it. In the silence and darkness of its pre-natal life, unseen and incalculable forces have wrought upon it. The unwritten law of the mother's being, and of the father's being, have worked together or against each other in molding their child, and they have brought forth a new creature whose like is not to be found "in all the wide earth's ample round." The mother knows not absolutely the law of her own being or of the father's, much less can she foresee the product of these unknown forces acting upon each other. Not less mysterious, then, than the "Man with the Iron Mask" is this helpless, silent little creature, who for a whole year has "no language but a cry" in which to plead for the righting of its wrongs, or a gracious smile betokening ease, or in response to looks of love.

The creative work of the mother has been accomplished, and now she must devote herself to the nurture and guidance of her child. And let me say that I shall allow myself the privilege of considering my theme from the stand-point of ideal motherhood, as I conceive it; for is it not best to keep our faces turned toward the ideal? And not for one moment do I enter into judgment upon the overburdened mother whose life must be a continual struggle against poverty, or that other mother whose fate is still more sad in finding the greatest obstacle to her work the father of her children. But let that mother give thanks morning and evening whose creative work of motherhood has been accomplished in an atmosphere of sustaining sympathy, and whose physical strength has never been taxed at the expense of her child. That mother begins her work of nurture and guidance, with every human advantage. While the law of heredity cannot be formulated, indeed seems to be past finding out, we cannot doubt that that child is best equipped for life, whose inheritance is a harmonious, well-balanced nature, whose chances for physical health are good, and who takes his place in the world not with the hesitancy and timidity of an unbidden guest, but with the happy assurance that he comes to his own place —a place that waits for him and no other. The first years of the child's life must be given largely to his physical nurture. Good teeth, good stomach, stout muscles, steady nerves, these are the instruments of this present life, and it is of the utmost importance that these be secured to the child. And they do not come in a hap-hazard, matter-of-course way. To secure them, requires the direct, personal supervision of the mother. She

may have the help of paid service in doing some of the details of this work, but she must herself give her mind to it to select the food best suited to the body's growth; to provide it at proper and regular intervals; to make the dress suitable for the protection of the body and the development of the muscles; to secure healthful, nerve-strengthening sleep. She can get for money the service of a cook, parlor maid or seamstress; she can delegate to the childless, for the time being, her society duties, and she can intermit for a brief season her own intellectual pursuits, rather than trust to hired service her baby's physical nurture. Is it a hard thing to require of the mother that she shall devote herself so closely to her child, that she shall give up society pleasures and even the dearer delights of study? Let her remember that motherhood is her business now! She has had school-life, she has had society, she has had literature, she has had wifehood—now she is a mother, pledged by the sacredness and the infinite import of this new calling, to self-abnegation, to the highest good of the child to whom she stands as creator and providence. And besides, how short the time of this close devotion of the mother! Only a few years, so quickly flown, and the self-dependent life of the child begins, and then the mother may go back to her queenship in society, all the more a queen, or she may take up her books or her pen, enlarged and enriched in nature by the deep experiences of motherhood.

But it is not to the physical needs alone of the infant that the mother must so closely devote herself; the *spirit* begins to assert itself almost with the first breath; and along with the work of nature must be taken up the work of guidance. At this point, a fatal mistake is often made. The very helplessness of the baby so appeals to the mother's tenderness and pity that she is thrown off her guard, and sometimes quite forgets that a most important part of her office is to train this daily unfolding human plantlet, to control this "small despot," as Emerson names the baby, and of whom he graphically writes:

"The small despot asks so little that all nature and reason are on his side. His ignorance is more charming than all knowledge, and his little sins more bewitching than any virtue. . . . The small enchanter nothing can withstand—no seniority of age, no gravity of character; uncles, aunts, cousins, grandsires, grandames—all fall an easy prey; he conforms to nobody, all caper and make mouths, and babble and chirrup to him. On the strongest shoulders he rides, and pulls the hair of laureled heads."

The little sins of the little baby are bewitching indeed, as Emerson declares, but the mother must protect herself against their enchantment, for they are insidious, and, growing with the growth of the baby, soon cease to be little sins, and change to fixed habits that endanger the peace of the child and all connected with him. I have heard a mother mourn that her boy of twelve could not be depended upon. She could not even

trust him to do an errand that required prompt execution; and all attempts to direct his study or his play, or to engage him in regular work, were utter failures. It was plain to see that this mother had never taken up the leadership; that she had always devotedly responded to the cry of the infant, and yielded to the willful outbursts of the little boy; and now she was absolutely helpless before this undisciplined, self-asserting child of twelve. If the year-old baby has acquired the leadership, alas, for the mother! and alas, too, for the baby! She will never overtake him or outrank him in authority! She must begin almost with the first cry of the little one, to assert herself as its guide, to decide upon the general course of its development. She need not make a procrustean programme of action, but she should work to an elastic plan that will suit itself to the hour's needs. She must begin very early to gently practice him in self-control, in regularity of action. The superabundant egoism of this "royal guest," who feels that all the earth is his and all the fullness thereof, must be brought face to face with the egoism of other royal guests, and so made to know its limitations.

To do all this—and this is the earnest far-reaching work of the mother, during the infancy of her child—requires that mother-love have in it an element of heroism, of Spartan firmness, that shall carry her calmly and triumphantly through the storms of infant passion that may burst without warning upon her; that shall enable her to sacrifice the child's momentary pleasure to his future good. A bright woman, not herself a mother however, was heard to say:

"I believe aunts are a great deal better for children than their mothers, because the mother always *wishes* to let the child have his own way, while the aunt does not consider this in the least."

This brings me to the second part of my theme—the help that the mother may find in her work from the well-conducted kindergarten. At the age of three the time of babyhood may be said to have ended, and the period of childhood begun. The little one has accomplished two most difficult things—he has mastered his feeble, stumbling feet and brought them to a firm step; he has broken the silence of his first year's life, and now speaks the speech of father and mother, literally reproducing the words well or illy spoken by those about him. He is keenly alive at every point. His eyes are quick to see the wonders and glories about him; his ears catch every new sound; his hands grasp every instrument for expression of his activity. It is to be hoped that good physical habits have been established, and it is also to be hoped that the devoted mother has been able so to shape the gradually unfolding mental powers that they have acquired right directions of growth. Now he is ready to begin in earnest his systematic training for life. And since he cannot live an isolated life,

but must take his place among his fellows to work as one force with many forces, his education can best go on from this point, in the society of his peers, along with other little ones who have reached the same degree of development. Now the kindergarten opens its doors to him, to co-operate with the mother, to supplement her work, to lead him gently and safely along the pathway in which mother-love and wisdom have started his footsteps.

Let me quote from your president, Mr. Hailmann, who says that—

"The kindergarten is not a mere ingenious contrivance, invented for the purpose of amusing little children instructively, and of relieving indolent or overburdened mothers of troublesome embryo sufferers, but a *plan of education* that has its roots far down in child-nature, and that shelters beneath its branches strong, ripe men and women. It is not a mere cunning insertion between the nursery and the school, intended to train up the raw material for the wisdom factories, but a full scheme of education that is to lead the human being from birth to maturity on the road of a wise and useful activity to the goal of true happiness."

Now, for a few hours each day, the mother trusts her little one to the guidance of the kindergartener, who must be a woman of gentle and also heroic nature, profoundly tutored in the philosophy of education. She greets the child with smiling face on which glows her heart's warmth, and with that courtesy which she wishes should grace his intercourse with others. She takes him out of his isolation, and leads him into a circle of little ones, his peers, a new world to him, and teaches him how to live with them. He finds himself with ten or twenty other children all wishing the best place, or the sweetest flower, or to choose the morning song. She gently and patiently shows him how to give up his own wish when others should have the choice (a lesson, is it not, in citizenship in a republic ?), and not only to surrender his own wish, but to enter heartily into the joy of his fellow in choosing. She teaches him in a thousand ways that :

"All are needed by each one ;
Nothing is good or fair alone."

She makes song the medium of many lessons to him. By the happy aid of the imagination, he flies with bird as he sings; he nestles under the protecting branches of the trees; he gathers nuts with the squirrels; he grinds the flour with the miller; he mows the grass with the farmer, or he drives the nails with the carpenter. He learns the colors and the odors of flowers. He grows to be hail-fellow with caterpillars and turtles. He is brought close to the heart of nature through this loving familiarity with her varied forms; and all the years of his life will thereby be enriched and gladdened. And these songs will be so many seed-grains in his soul, to mature in due season as they sing themselves over and over to him, and fructify in forms that we cannot foretell. He is trained to

move with music. This not only cultivates ease and grace of bodily movement, but it directly exercises the will-power to hold the action of the muscles to the time of the music. The hand, that wonderful instrument of human activity is, from the beginning, restrained from destructiveness and trained for service. The needle, the pencil, and the modeling knife are the tools with which the hand is directed by the mind toward definite results. The eye becomes skilled in the comparison and the measurement of objects. To-day's occupations are the natural successors of yesterday's achievements, and are carefully chosen as preparatory for the work of to-morrow. It is only in thus associating with other children that the moral nature of the child can be harmoniously developed. It is this association with others that calls out selfishness or generosity, that trains him to be just to their claims, that strengthens him in self-restraint and stimulates his helpfulness.

In this brief outline I have indicated the threefold nature of the kindergarten's work with the child, as supplemental to the mother's work. It is directed toward his healthful physical development; in accordance with the laws of mind it directs his mental growth; and his moral nature is carefully stimulated and nurtured. As illustrative of my subject let me add a few notes that I have been privileged to select from a kindergartener's note-book—a record kept only for her own use, but kindly placed at my service:

"This morning M. got quite angry over his work because he could not do it at once—almost frantic—twitched and kicked, stiffening his limbs. I told him to go by himself in the dressing-room, and come back as soon as he was over his bad feelings. He came out in about two minutes, smiling, and went to work as if nothing had happened.

"Was so pleased to-day to see what control S. had over his eyelids under trying circumstances. He, with others, had been asked to close them on account of too much noise from that quarter. Just then Miss E. came in with a turtle which she allowed to crawl over the floor, much to the children's delight. They made demonstrations so that S. knew that something unusual was going on in the room, but did not move his eyelids."

"A little boy brought his drawing-book to me to have me rub out some poor work he had done—said, as he handed it to me, in a wise and apologetic way, that 'his eyes were a little out of sight when he did that.'"

"In the morning-sing to-day when all were assembled, two turtles, a large and a small one, were brought in for the children to look at. The turtles crawled about, going *toward* some children; not one was frightened, but all were delighted, and laughed aloud."

"Was talking with K. alone on Friday about telling the truth, and owning it when he had done wrong, instead of denying it as he generally does. To-day he was put to the test, and conquered himself by confessing promptly when questioned."

To these notes of the kindergartener, let me add also some of the points of the replies which I have received to my personal inquiry of mothers:

"What help have you had from the kindergarten in your work with your children?" "The love for flowers instilled into the children." "The lessons in manners." "The habits of punctuality and regularity." "The happiness of the children." "The habit of working or playing to a plan—the concentration of the mind upon one thing at a time; the habit of order." "The exactness of the children in regard to lines; their knowledge of birds." "The ease with which the little girls use a needle." "The ability to occupy themselves at home in kindergarten ways." "The cultivation of generosity." "The practice of appealing to the child's reason which makes it easy to govern him."

These replies are all from mothers who have had one, two or three children carried through the four years' course of kindergarten training. It seems to me they cover every point claimed for this training. No criticism has reached me directly from mothers, but in one or two instances this complaint was reported to me: "Since my child has been in the kindergarten he is a great deal more troublesome." I learned that this complaint was made of children who had been alone up to the kindergarten age, and probably their association with other children had brought out some traits that the mothers had had no chance to discover before. It may be that they were only confirmation of the need of the child to be trained to live with his fellows.

But I think it true that there are some children too delicately organized to bear the excitement of a large kindergarten, who could not endure the nervous strain of three hours in the stimulating society of a large number of children. And there is still another point that must give some solicitude to conscientious mothers. Little ones carefully nurtured at home, are somewhat exposed to the danger of contamination when they associate with children from homes in which vulgar influences prevail. However great the care of the kindergartener to protect him from this danger, the rough word will sometimes reach the unaccustomed ear, and the rude action startle the gentle child, or be reproduced by the very susceptible child. But, in my opinion, this risk is overbalanced by the greater dangers that threaten children who must be reared in strict isolation.

One word is to be said of the help which the mother may gain for herself from her relation to the wise kindergartener. If she be a thoughtless, undisciplined mother, and there are such in every stratum of society, the life of her child in the kindergarten, may be the "new birth" to herself; it may be a revelation undreamed of, of the sacredness of her work as mother. If she be an ideal mother she has now the co-operation of one whose consecration to the development of child nature, makes her second only to the mother herself in deep interest in the child; and from the two differing stand-points of mother and kindergartener they can study the perplexing problems that are sure to arise in the course of the child's develop-

ment. The kindergartener is likely to have this advantage over the mother, that her training has enabled her to appreciate more perfectly the processes of the child's development, and so to look upon him with a larger charity, and to see in what the mother grieves over as naughtiness, only the crudity which time will correct. On the other hand, the kindergartener may discover really evil tendencies which had escaped the mother, and which call for their combined efforts to overcome. Thus she will find in the kindergartener consoler and counselor; indeed, each will support the other in their united work to secure for the child a harmonious development of his nature, to direct his footsteps forward and his outlook upward, toward ideal manhood or womanhood.

The mother as handmaid of the Lord, will recognize in the consecrated kindergartener a fellow-worker in the garden of the Lord.

## *RELATION OF THE KINDERGARTEN TO THE PRIMARY SCHOOL.*

BY HON. JOHN W. DICKINSON, SECRETARY BOARD OF EDUCATION, MASSACHUSETTS.

In determining the relations which the kindergarten should hold to the public primary school, it is necessary at first to make plain what states of mind the child must possess that he may enter with facility upon his primary course of instruction.

On entering school the primary pupil is directed at once to his language lessons. The ability to use language implies a knowledge of that which it expresses, and of the signs by which expression is made. Language may be used to affirm names and qualities and relations of objects of thought.

The most elementary proposition that can be constructed is one which is used simply to affirm a name of some object. The mind is prepared to use such a proposition by first forming a clear idea of the object whose name is to be affirmed. A clear idea is one that enables the mind to set an object of consciousness clear from all other objects.

A proposition of a little higher grade is one used to affirm a quality of its object.

A preparation is made for an intelligent use of such a form of speech by first obtaining a clear and distinct idea of the object to be known. A distinct idea of an object implies a consciousness of its qualities.

A proposition affirming a quality is higher than one affirming a name, as it implies both a perception of an object and an analysis of its qualities. A distinct idea places its object as a distinct thing before the mind. The possession of distinct ideas, together with an acquaintance with the forms of speech by which they may be expressed, prepares the learner for a description of things.

A proposition of still higher grade is one used to represent the relations that different objects of thought may hold to one another. The relations may be affirmed of two or more individual objects, or of all the individuals of a class.

A form of speech which affirms relations represents a higher kind of mental activity than we have before considered, as it implies perception, analysis, comparison and generalization, and furnishes the mind with right occasion for those comprehensive ideas that are the elements of all classification. The possession of comprehensive ideas, together with a knowledge of general terms and propositions, prepares the mind to make and understand definitions.

This is a ball, is an elementary proposition, and expresses a clear idea. It is used to affirm the name, ball, of its object.

The ball is round, expresses a distinct idea. This proposition is used to affirm a quality of its object and implies an analysis.

Balls are round, expresses a comprehensive idea, by affirming the relation of a quality to all objects of a kind.

An idea that is clear, distinct and comprehensive may be called a perfect idea.

From what has been said one may infer the true order of teaching. The order is determined by the order of progress which the mind makes in its acquisition of knowledge.

The first work of the children in the primary schools is with the objects and their names. Facility and accuracy in the performance of such mental exercises are acquired by practice.

The kindergarten, with its occupations and gifts, brings its members in constant contact with the objects of their ideas and with the signs by which they are known. In this way facility in observing, and in using language, will be produced before the children come to their special tasks in the primary school. In connection with the facility, a fondness for handling objects will be cultivated, a most important condition of true progress.

Secondly, occasions may be presented for distinct ideas, by leading the child to set the qualities of objects apart from one another by analysis, for more special examination. A preparation is made for this work by exercises with the qualities of bodies.

The kindergarten, with its objective methods, brings form, color, size, numbers, etc., into the presence of the children, and encourages them to become familiar with their appearances and skillful in arranging them in new combinations.

The observation of individual objects of thought as wholes, and the analysis of them for a knowledge of their properties, are the elementary steps that must precede the consciousness of comprehensive idea, such as constitute the elements of all scientific classification.

The playful occupations of the young children in the kindergarten have a tendency to produce a symmetrical development, and to occasion those simple ideas which are to be the elements of all future knowledge.

It is of the highest importance to the child that his faculties do not become dwarfed at the first by being deprived of proper mental food. The development of every human mind is self-development produced by self-activity, but the activity is modified by the nature and relations of its objects.

At the first the child has no facility in the use of his faculties, nor has he any tendency to use them in an orderly way. By use both facility and habits will be acquired, and the nature of the facility and the character of the habits will be determined by the kind of use which produced them. For these reasons it plainly appears that the first activity which the child exerts, although spontaneous in its origin, must be rightly directed, in so far at least as may be done by turning his attention to proper objects and by furnishing him with the proper stimulus.

If these two things are skillfully done for the young child in the infancy of his life, he may be introduced into his primary school work with a love for knowledge, with many clear and distinct ideas, and with that which is of the highest importance to the young primary pupil, some power of self-control.

There is a culture which should precede primary school training and prepare the children for it. It may be introduced by those influences that simply direct the children in their play. Locke says that all the plays of children should be directed toward good habits, or else they will introduce bad ones.

It would be well if the spirit of the kindergarten were introduced into all primary instruction.

The kindergarten should be made a universal institution. Every child, either at home or in an organized class, should from his early years be directed in his spontaneous activity.

The direction should have reference to a harmonious development. If the child is started off from the first in the race of life in a way that will co-operate with nature in producing results upon himself, no after labor need be spent in preparing him to begin his public school work.

It is not a plain case how the kindergarten may be included in a system of public schools. Some of the arguments in favor of such an arrangement have been given.

The thing can be partially accomplished by allowing the primary schools to pursue kindergarten methods for a period of time before entering upon what is now considered to be elementary training.

Another way is to combine kindergarten instruction with regular primary school work. In this case the children would enter school at an earlier age than they do under the present organization. This might be done in the cities, but not easily done in country towns.

There are some difficulties to encounter in all cases. Our school-

houses are not rightly constructed, nor are the school grounds rightly arranged for kindergarten exercises.

Both these difficulties may be overcome, but it must be done at considerable expense.

The methods of the kindergarten are not in harmony with the methods practiced in the schools as now conducted, so that the children in passing from one to the other would be disturbed at the change and unprepared to accommodate themselves to it.

A successful kindergarten teacher must be fitted by nature and training for the peculiar service she is to render. She must have a strong mind and a good heart as the basis of her accomplishments. She must understand the philosophy of education and be skilled in the application of its principles to the infant mind. There are not many such teachers known to the profession. The number, however, is increasing, and the demand for their services is increasing also. The home is a good place for kindergarten instruction to be given. Here, subject to the pure influences of a wise parental love, the young child should be started off in his human life free from unnatural restraints and unhappy associations, stimulated by good examples and a consciousness of the harmony existing between the faculties of his mind and the objects of their activity.

It is to be hoped that a higher civilization will find a way to remove all obstacles, and permit the children to begin their intellectual lives under influences most favorable to human development.

## SOME ESSENTIALS OF THE KINDERGARTEN.

BY MRS. EUDORA HAILMANN, LA PORTE, IND.

You who have followed the progress of the kindergarten in this country during the last twenty years cannot have failed to note the growth of the idea itself among its friends. A broad catholic spirit has taken the place of narrow sectarianism. The kindergarten has ceased to be an institution for the convenience of the few, and its principles and methods have begun to pervade the primary schools and bid fair to vitalize the work even in higher departments. Like all other foreign importations into this land of the free, it has undergone and is undergoing an adapting, idealizing process. Yet there are some essential phases of it which apply to childhood everywhere and need no modifications. Among these I would mention the thoughtful regard for the time element in growth, the reverent use of music, and a trustful, simple spirit of oneness between the child and the kindergartener. I have selected these points not because they are all, nor even because they are necessarily the most important of the essentials, but because to me they seem to need more urging than others of which I make no mention.

In Germany, and there is no reason why this should not be true of America, when the little four-year-old children enter a kindergarten which still adheres to the ideals of Froebel, it is presumed that they will remain two or three years. During this period they grow in mental and bodily vigor and activity and acquire great outward self-control. Rhythm and song (as natural to the German as flying is to the birds) develop into music; the hand becomes skillful in the manipulation of fine and delicate material; the children become patient, persevering, self-helpful, independent, eager to investigate Nature, and "feeling life in every limb," confident of success in whatever they undertake.

If the little boys are arrogant and despotic in their intercourse with the little girls, and learn early the passing value of that egotistical diplomacy which characterizes European politics, this is due to social conditions and not to kindergarten influences, which would lead rather in the opposite direction. Blind obedience to the arbitrary behests of constituted authority reacts in the children, and they in turn become arbitrary and dictatorial.

While the children learn much and grow rapidly, there is no cramming in the ordinary sense. It is true, they are rigidly held to habits of

industry, but precocity is discouraged, and German kindergarteners have learned to labor and to wait for the ripening of the fruit. In this respect we would do well to imitate them. There is among us, not unfrequently, a nervous sub-conscious impatience to make our children smart and showy at the expense of thoroughness, breadth of vision, intellectual power, and modesty. Some kindergartens make the impression that children and the kindergartener are in a chronic state of dress parade. American children become self-conscious early enough without special training, and this tendency is probably one of the most serious hindrances to their growth. It is generated and fostered in the home and kindergarten, by such expressions as, "Now, darling, show the lady how sweetly you can sing," "Make a pretty bow and recite your piece for the gentleman." In other words, "Make a show of yourself, my child." "Recite your lesson in vanity."

Two years ago I called on the mother of one of my little pupils. In her great eagerness to display the genius of her little girl, she requested the child, who was just five years old, to recite for me "Paul Revere's Ride." After an extravagant, unchild-like, dancing-master bow, and much grown-up lifting of the eyebrows, and sanctimonious pursing up of the lips, she began, and recited almost the entire poem with little prompting. When she had finished, she smiled patronizingly and bowed herself away in a manner which would have done honor to an expert. And this was cited to me by the mother, who, by the way, had taken a training, as the result of the kindergarten.

When I touch the subject of music for homes, kindergartens, and schools, I feel, perhaps more keenly than with other phases of educational work, like one treading on holy ground; for music more than any other educational influence contributes to the uplifting of the emotional nature. Every variety and shade of feeling in the human breast finds an idealized expression in music. Yet, with all the superfluous *Song-birds, Gems, Lyres, Songs for Children,* and so on to the end, it is like hunting for needles in a hay-stack, to find a number of songs suitable in works and spirit of melody, sufficient to last children during the four seasons. Nothing can be more incongruous than the fitting of the simple, innocent words of childhood to the repulsive, ribald melody of a common street song. If singing be merely a surface accomplishing, a *modus operandi* for passing off a portion of the kindergarten, or school session, one song would probably be about as good (or, rather, as bad) as another; but if the music of the school and kindergarten is to be utilized as a powerful humanizing spiritual force, it must correspond to high ideals, the melody should harmonize with the words. Disjointed monstrosities will do for the distorted feelings of some of our university students, whose sense of the beautiful is temporarily blunted, but reverence, faith, joyousness,

humaneness will not be fostered in the young soul by such food. In the murmuring of the brook, in the whisper of the breeze, in the rush of the cataract, in the song of the birds and myriads of other voicings, Nature teaches the music best adapted to our children. And it was a happy thought of Froebel to gather and arrange these strains for the little ones. Nevertheless, however much Germany may abound in suitable children's songs, so far as the melody is concerned, the words of these are often beyond their comprehension, and when translated into our language, more particularly when this is done by persons wholly destitute of poetic grace, they become simply ridiculous. This music question touches a broad and comparatively unbroken field in America. Would that some genius lover of childhood would do for our little ones what Beethoven, Händel, Weber, Schubert, Rubenstein, Schumann, and our other great tone masters have done for us.

Of equal, perhaps even greater importance, in the work of the kindergarten, is that simple, trustful spirit of oneness between the children and the kindergartener, which may transform even an old-fashioned primary school into a paradise of childhood, and whose absence renders the most elaborate kindergarten outfit an illusion and a snare.

A few years ago I stepped into a fully equipped kindergarten in one of our large cities. The kindergartener in charge was a lady of about sixty summers. I remained in the room during a *lesson* with the interlacing slats and the closing of the morning exercises. She began with telling them a story in accordance with orthodox kindergarten rule, while they sat, faces demure, with hands folded and resting against the edge of the table. Thereupon *she* played *for* them while they gazed vacantly at her.

Occasionally a gentle yawn escaped the lips of an overcharged little victim. At last she did permit them to do something themselves, and they eagerly set to work, and made some quite difficult geometrical forms with the slats. While they were doing their *lesson* she told them that she would hang the best, most evenly made forms on the wall, which she subsequently did. I noticed the face of one little boy during the operation of selecting and hanging up. He looked affectionately at his own work, tried his best to straighten it and make it perfectly regular, and cast a questioning, pleading look at the *judge* as she passed him by. While the favored elect were smiling and chattering over their success and the discomfiture of their friends, he leaned back in his little chair and waited—waited, I presume, until he might go home to mamma who at least would understand matters and console him. There was a curious fascination in waiting to see the end, and I remained through the "Good-bye Song," and the general formal hand-shaking. When she thought they had all gone, she turned to me and began to expatiate eloquently on the "beautiful kindergarten system," the "precious little darlings," "angels fresh from

the hand of the Creator," her own devotion to "the cause," etc., etc., etc., *ad finitum*. I said she thought they had all gone, but the same little slow boy now came timidly from the cloak-room for his good-bye shake. However, seeing her busy talking, he hesitated, and in a gentle, admiring sort of a way put his hand on her handsome gold chain which hung at her belt. Involuntarily, still talking gushingly of the "little ones" and the "cause," she nervously brushed aside the little hand, and at the same time I noticed a momentary twitch of impatience pass over her face.

I could resist it no longer and said to her: "He has been waiting very patiently to tell you 'good-bye.'" This lady had been a trainer for many years, yet, in spite of her knowledge and favorable surroundings, she was not a kindergartener.

Again: a few weeks since I accompanied my husband upon an expedition in search of a primary teacher. After much uncertainty as to whether a certain large frame building which we had observed in the distance was the school-house or a saw-mill, we tied our horse to the fence and approached the entrance. We were met at the door by the happy faces of thirty or forty little girls and boys and their lovely teacher, on their way out to play. Teacher and children smiled a cordial welcome, and she invited us to come in. I shall not take time here to recall the exercises of that hour, but I can truly say that in that homely school-room, in the midst of dry book-lesson learning, there was more of that spirit of oneness, which is the essence of the kindergarten spirit, than in the so-called kindergarten sketched above. In school and kindergarten the inspired teacher will put forth points of contact by which the child will be lifted up and away from selfishness and egotism into a world of benevolence and beneficence.

Indeed, that spirit of oneness is at the very root of the spiritual and religious phases of our being, and all educational systems—in home, kindergarten, school, college, and university—which do not contemplate the cultivation and strengthening of the spiritual and religious phases, are deficient at the very core.

Our educational institutions, high and low, with much that is commendable, are yearly turning loose upon the community hosts of young intellectual abnormities, to whom only many subsequent years of experimental life-work can restore a modicum of comparative brain and heart equilibrium.

These evils have their roots in early school or kindergarten life. There is an inordinate eagerness to acquire knowledge; a selfish ambition to get just so much intellectual capital in just so much time. Young people, with motives beyond self, seem as rare and as much to be sought after as water in a desert.

"As the twig is bent the tree is inclined." The very gait of the middle-

aged man or woman is marked by the direction the little feet took in learning to step, and by the attitude in which the mother or nurse held the little body. The hand-writing is subject to influences even antecedent to the teacher who first directed the position of the arm, wrist, and fingers and led the sorry urchin into the intricacies of pot-hooks and pen-pigeons. If, then, as kindergarteners, we would militate against the evils in question, let us, above all things, attend to essentials, giving the little ones time to grow strong and self-dependent, gladdening, sweetening, and idealizing their lives with the fervor that music brings, and higher and deeper than these, by fostering in their souls that simple, trustful spirit of oneness which will lead them to the Father.

# DEPARTMENT OF MUSIC EDUCATION.

The Department of Music Education had its origin in the efforts of Messrs. L. W. Mason, of Boston, Mass., and T. F. Seward, of New York, at whose suggestion a goodly number of teachers of vocal music assembled at Madison, Wis., at the time of the meeting of the National Education Association, July, 1884. At that meeting of music teachers, Mr. Daniel B. Hagar, of Salem, Mass., served as chairman. Mr. L. W. Mason gave an account of Japanese music, and of his method of teaching music to the children of Japan; Mr. N. Cox Stewart, of Cleveland, O., and Mr. G. F. Junkerman, of Cincinnati, presented their views in regard to the proper method of teaching music; and Mr. Theodore F. Seward, of New York, made a plea in behalf of the "Tonic Sol-fa" method.

It was voted to petition the Board of Directors of the National Educational Association for admission as a Department of that Association. The petition was granted, and the Department was organized by the election of the following board of officers:

President: Daniel B. Hagar, Salem, Mass.

Vice-President: O. S. Westcott, Chicago, Ill.

Secretary: T. H. Brand, Madison, Wis.

*Directors:*—L. W. Mason, Boston, Mass.
N. Coe Stewart, Cleveland, O.
O. Blackmann, Chicago, Ill.
T. F. Seward, New York, N. Y.

The Department of Music Education met in the Second Presbyterian Church on Wednesday, July 15, at 3 o'clock, P.M., and was called to order by the President, Daniel B. Hagar, Ph.D., of Salem, Mass.

Prayer was offered by Rev. W. R. Terrett, pastor of the church.

The President, after a few introductory remarks, delivered the following address:

## *PRESIDENT HAGAR'S ADDRESS.*

THE importance of music as a branch of school education is, in this country, poorly appreciated, even in communities that recognize it as one of their school studies. Under the most favorable auspices music is too generally regarded as inferior in value to the more common branches; as designed to afford recreation rather than mental culture. Hence it too often enters the school-room with words of apology, doubtful of its right to enter, and humbly grateful for the modicum of time and attention there grudgingly conceded to its claims. But I firmly believe that it may justly demand a consideration far higher than it has yet received, and that, upon

a full examination, it will be found to present means of culture broader in scope and more comprehensive in variety than are to be gathered from ordinary branches of study. I propose, therefore, to state, as fully as the few minutes assigned to this address will permit, some of the points that give importance to music as a school study.

The great ends of education are two: Knowledge and discipline. Knowledge of itself possesses a high value; discipline of itself is much more valuable. This principle is universally admitted by educators. Hence, in the selection of a course of study, the question asked by intelligent men is not what studies will yield the largest amount of immediate knowledge, but from what can be obtained the highest mental and moral discipline—a discipline which will enable its possessor to gather knowledge readily in any desired field, and to perform with success the various moral duties of life.

I. Let us, then, in the first place, briefly consider the comparative claims of music as a means of mental culture. Placing it side by side with the usual studies of the school-room, what estimate shall we put upon it? Does it at the outset and in its course of pursuit present as numerous and important occasions for mental activity as spring from those studies which universal consent has assigned to the common schools?

1. The faculties that first come into play in elementary instruction are the perceptive faculties. Any study that brings one or more of these into vigorous action has a fair claim to respect. Compare, now, the simplest perceptions excited in reading, for example, with those excited by music. In the former, as commonly taught, we have a single character called a letter, which indicates a certain sound—sometimes a very uncertain one—and nothing more, while in the latter we have a sign called a note, which when taught to the pupil—as the letter must be in order to convey an idea of its use—gives him a perception not only of a sound, but also of a musical sound and of the length or time of the sound. Hence the teaching of the simplest element in reading gives far less occasion for mental action than the teaching of a corresponding element in music, and, of course, the less the action, the less the power acquired. Take, also, a single character in arithmetic—a figure. By itself it denotes a number, and that is all. The idea it suggests is a simple one, and therefore calls for little effort on the part of the pupil. In like manner, in teaching the elements of most other school studies, we shall find that we excite less action of the perceptive faculties than we do when we impart primary instruction in music.

2. Next in order, after the perceptives, comes memory. As a means of cultivating this important faculty, how shall we estimate the study of music? Exercise is the antecedent of growth, and, within certain limits, the more varied and energetic the exercise the stronger the growth. Now, in what way and to what extent is the memory exercised in connection

with the common studies in school? Arithmetic has its definitions, its methods and its rules, which must be learned and remembered, in substance, at least, and, under most teachers, in words. So have grammar and geography and other studies. But no less has music its numerous definitions and methods and rules, which need to be substantially stored in the memory. Nay, more ; as the relations of music, involving all varieties of rhythm and melody and dynamics, are exceedingly numerous, the study of music is pre-eminently adapted to the culture of the memory. Passing now beyond the region of definitions, rules, and statements of methods, we cannot fail to see that this branch of study is highly favorable to the training of the memory. No one will deny that the careful learning of psalms, hymns, odes, and ballads develops the memory, imparting to it quickness and retentiveness. Music can be made to do all this and much more ; for, in addition to remembering the words that are to be sung, the pupil may also be required to hold firmly in mind the pitch and length, the power and expression of every note to which each word is adapted. The extent to which this kind of training can be carried is manifested in the achievements of professional singers, who have at ready command the librettos and musical scores of numerous operas, each of which is beyond the grasp of most memories.

3. In close connection with memory is the faculty of recollection, in the training of which music may perform an important part. To recall at will the facts and statements of history, the principles and rules of arithmetic or grammar, the truths of geography, or the words of an oration or a poem, imparts activity to the recollection, but no more effectively, certainly, than does the voluntary recalling of poetry and music combined.

4. Again, the study of music may justly claim to accomplish much for that great faculty of the mind called the understanding.

Sir Wm. Hamilton uses this term for the faculty of relations or comparisons. By it we distinguish the relations of parts to wholes, or wholes to parts ; we discern resemblances and contrasts ; we classify ; we generalize. By this faculty we recognize the bearing which one thing has upon another ; we discover whether the relations which are observed at a certain moment to exist are the natural normal relations ; we connect cause with effect, and effect with cause. In a word, the understanding is, to a large extent, the working power of the mind. Manifestly, any study that directly and largely tends to develop this power deserves the respect of all friends of education. It is evident, also, that the greater the number and variety of the relations involved in any science or art, the greater its value as a means of strengthening the understanding.

Let us glance now at a few of the most obvious relations of music. Take, for example, a single note of a tune. What are its relations? In

regard to length it bears a fixed relation to the absolute standard—a whole note—and also a relation to the various rates in which the passage containing the note may be sung. In regard to pitch it has a relation to the established tonic note of the natural key, to the fundamental note of the given key, and to the notes immediately preceding and following it. In regard to power, it may be uttered with many different degrees of force stronger, and many weaker than that which is commonly assumed as the standard. In regard to expression, it bears relations as various and important as, in elocution, words bear to the emotions they express. In fact, the internal relations of music—those that exist among its parts, including the complex laws of harmony, and its external relations—those which connect it with other sciences—are infinite in variety and degree, and have afforded the amplest scope for the understandings of as mighty intellectual geniuses as the world has ever produced. Now, when we consider that in the simplest musical exercises, many of these relations must be recognized by the learner, and that, in his onward progress, those which are more and more difficult come into view, until at last the strongest understanding finds occasion for using its best powers, we cannot fail to see that the proper study of music deserves a high rank among school studies, as a means of improving the understanding.

5. That the study of music tends to cultivate the imagination, is obvious; for there is no emotion or passion which cannot gain utterance in music. As the student of poetry, painting, or sculpture finds his own imagination kindled to action by the glowing examples which genius sets before him, so may the humblest student of music gather from the simplest as well as the profoundest works of the great tone-masters, inspirations that shall breath new life into familiar song, and start into being new creations of melodious thought.

The critical study of poetry is fast becoming one of the prominent branches pursued in our higher schools and academies, and the committing of poetry to memory is largely favored in the best grammar schools; and one of the chief arguments in favor of such a course is that it refines and invigorates the imagination. This is undeniably true. But whatever can be said of poetry in this regard can be said with stronger emphasis in behalf of vocal music; because the words sung are the embodiment of sentiment and emotion, and the melody and harmony of the music give another form of expression for the same sentiment and emotion; and thus is the imagination energized by two co-operating forces.

6. Again, however the faculty of reason may be defined—and its definitions are numerous—it cannot well be denied that a science which occasions the most vigorous exercise of the understanding affords ample scope for the reason. The former takes in a knowledge of the various musical relations; the latter, using these relations as means, proceeds

to conclusions and principles. The single fact that controversies have always existed among the devotees of music concerning its true character and development, its true principles and methods, shows that the study of music is capable of making large drafts upon the reason.

I have thus briefly referred to some considerations which, if justly taken, show that the study of music, properly pursued, possesses great merit as a means of promoting intellectual culture ; and that consequently it has fair claims to a more prominent place among school studies than it has hitherto occupied. So long as musical instruction goes no further than to accomplish the singing of a few songs by way of recreation, it fails to achieve the best intellectual results, as much as would instruction in arithmetic or grammar, or any other study, if limited to its simplest rudiments. Let music cease to be regarded as a thing of comparatively small importance ; let it take rank as a science to be as thoroughly taught as any other branch of common education, enjoying a fair share of the teacher's time and attention, and the results will not fail to justify its largest claims. Moreover, the discipline thus obtained will prove useful to the mind in its various fields of action through life, giving it strength and flexibility, just as certainly as the discipline derived from the pursuit of algebra, geometry, and kindred branches, develops mental power which can be usefully applied in any department of practical life. And even if we take the lowest material views of the subject and regard a knowledge of music solely as a means of earning a livelihood—and that surely is a practical thing in the eyes of the veriest Gradgrind—we shall find that even now it directly supports more men and women than does a knowledge of the higher mathematics, or astronomy, or geology, or, in brief, any one of the higher studies commonly pursued in our schools.

II. In the second place, music holds an important relation to schools on account of its moral power. So evident is this truth to every one who gives it due thought that it seems hardly necessary to enforce it. Among all classes of people, in all periods and conditions of life, we recognize the mysterious influence of music. We see how it calms the troubled mind ; how it sheds cheerfulness upon daily toil ; how it revives the drooping spirits; how it carries the sweetest pleasures into the family circle ; how it lifts the soul from the dull plains of earth to the celestial mountains.

The mother's lullaby that soothes the restless infant, the trumpet and drum that summon a crowd in every street, the merry glee that sheds joy amid the social gathering, the serenade that floats so sweetly on the evening air, the thrilling song that fires the patriot's soul amid the din of battle, the solemn hymn that soars to heaven wherever Christians meet—all reveal the mighty power of music. And nowhere can this power be exerted more happily than in the school-room. It there serves to refresh the wearied mind and body ; it lightens the burden of school life; it helps

to remove discouragements; it clarifies and invigorates the mental faculties; it quickens kind feelings among the pupils and between teachers and pupils; it elevates and refines the taste and imagination. Thus music becomes one of the most efficient governing powers of the school; for, wherever the spirit of harmony reigns, disobedience, idleness, and disorder are rarely seen. Make the prevailing tone of the school-room right, and general discipline becomes easy and pleasant. For the accomplishment of this most desirable end, music is one of the most potential agents.

III. In the third place, music may justly claim a prominent position in schools by reason of its influence on physical culture. It is of the utmost importance to health that the lungs and vocal organs should be in a sound and vigorous condition. When these are diseased or weak the entire physical system suffers and fails to perform satisfactorily its proper functions. Any organ that is not sufficiently used loses, sooner or later, its natural power. This is a universal law. It can hardly be doubted that thousands of people are at this moment suffering from weakness of lungs simply because they have never given the lungs enough to do. Cases are not few in which debility and symptoms of consumption have been entirely removed by the judicious practice of singing. Every singer well knows that the voice gains power by careful exercise, and loses it through lack of exercise. Vocal music enlarges the lungs, expands the chest, and gives increased vigor to all its organs. It brings in more oxygen to purify the blood, and thus diffuses health and activity throughout the body. That the wise practice of vocal music thus promotes physical health no physician will deny. But it does more than this: We all know that the condition of the mind has an intimate connection with that of the body; hence, whatever tends to keep the mind in a healthful, happy state tends also to advance the physical well-being; and so it comes to pass that music subserves in a two-fold manner a true physical training. I have not a doubt that the early, systematic, and persistent practice of music in our schools would be instrumental in prolonging thousands of lives, and in saving multitudes from that direful disease—consumption. If these things are so, does it not become the imperative duty of those who act as the directors and guardians of our schools to make large use of an instrumentality which bears so directly upon the life-long health and happiness of the children who are placed under their care?

I have endeavored to show as concisely as I could that music holds three very important relations to school education; first, that it relates to the culture of the chief intellectual faculties; second, that it relates to the development of the moral powers, and, third, that it relates to the health and physical training of children. It holds other relations, but these are of prime importance.

Now, if it be true that these relations do exist to an extent at all com-

mensurate with the claims here presented, it certainly follows that the study of music is entitled to hold a conspicuous place in the course of common school education. The great benefits arising from this study, when wisely pursued in the public schools, will be limited to no class or condition, but will manifest themselves in the life of every individual, in every family circle, in every social gathering, in every house of worship; in short, at all times and in all places, when and where the brighter, happier, higher emotions and aspirations of the heart and soul seek to find utterance.

Mr. T. H. Brand, of Madison, Wis., the Secretary of the Department, read the following paper, on

## *VOCAL MUSIC IN THE PUBLIC SCHOOLS.*

BY T. H. BRAND, MADISON, WIS.

We have assembled as a body of musicians and teachers, under the auspices of the National Educational Association, to compare notes and consult each other in regard to methods for the successful development of vocal music. The consideration of vocal culture, or voice-building, is very pertinent in this connection, and deserves, at least, the position of a very essential auxiliary. But, to my mind, it is the first and most important step to be understood. As the field is too broad to admit of detailed statements at this time, I must, of necessity, be allowed to digress somewhat from the usual course. I shall endeavor, however, not to run into by and forbidden paths.

In order to obtain a consistent starting-point, as a text, I must stop the pendulum of time, and step back into childhood, thirty-seven years ago. When a mere boy, I possessed, as I was told by my teachers, a remarkable voice. By over-exertion, in preparations for special entertainments and inconsistent treatment, I was stricken with paralysis of the left side of the face and the vocal organs, thereby depriving me of the use of my voice for two years.

The channel through which this calamity originated has frequently been brought to mind when I have visited schools in which vocal music and rhetorical exercises have been used simply for special *amusement* or recreation, instead of being taught for their full value of discipline in developing *thought*. When I have seen Carl trotted out to speak his piece, or Maud required to sing for a visitor, I have thought it an auspicious occasion to educate a monstrosity, and I have lamented the poor judgment displayed by the teacher. Therefore, I have utilized this incident in my life as a practical experience worthy of consideration at this time, to inspire thoughtfulness and the exercise of more careful treatment in the management of children.

"*Youth* is the time to serve the Lord," sings one. Aye, and it is the time when pernicious ideas and habits may be inculcated; and too much earnest care cannot be bestowed in imparting knowledge of a healthful character in a healthful manner. This suggestion may be made practical in various ways. But we wish, particularly, to construe it now to the education of the voice. Who can forget the care and attention they devoted to their offspring while learning to utter the "papa" and "mamma,"

which, when expressed, was hailed with joyous delight; and how words which followed were corrected and repeated time and again, until perfection rewarded their efforts? How spontaneous was the *pure* voice ringing through parlor and hall, and often through the night! Clad in loose garments, with every muscle in full play, sound seemed to exude from every pore, until frequently *that* sound seemed transformed into a living object—with a baby attachment as an automatic accellerando.

And then too often in *other* families—not in *ours*—ere a vocabulary is attained to supply general wants, that care and attention to speech is withdrawn; the body is bandaged to beautify (?) the form at the peril of life! Dancing, skating, and all manner of exercises are contrived to cultivate grace, as it is termed; but, alas! the *voice* is uncared for; mincing and lisping naturally follow; and ere they reach the age required to admit them into the public schools they are malformed in body and mind, and unfitted for the requirements demanded of them. And those under whose charge they are placed are expected to infuse into them a desire for learning; and they are blamed if unsuccessful. These are what may be justly styled stubborn facts, over which teachers have no direct control. But cannot a little consistant management be exercised in the primary departments with the object of reform in view, to be operated in conjunction with higher grades, and thereby check future progress in dudeism? This is a question worthy of consideration.

While the recreation proper is singing, let the exercises be conducted in such a manner as to inspire thoughtfulness in regard to the vocal organs, the instrument producing the music; give a few simple suggestions as to how the breath is practically converted into sound; how this sound is expelled from the throat by the action of the muscles of the chest, requiring them to place the hands on the body in a proper position, in order to notice the operation. These demonstrations should be clinched with observation in regard to proper dressing, thereby assisting in developing power and excellence. This would have a tendency to impress upon their minds the importance of the occasion, instead of being regarded as an opportunity for hilarity and forgetfulness; and, as a further incentive for the essential freedom of dress, I would advise a rigid course of physical culture, graded in movements and endurance from the lowest primary upward, giving the *whys* and *wherefores* for each motion. Children are naturally inquisitive, and are more prompt to obey if a reason is assigned. Such a result can only be accomplished by energetic and intelligent teachers, alive to the requirements of the times, who enter the field with a determination to succeed, regardless of special prejudices to impede their work. But either through ignorance on the part of teachers, or a fear to conflict with ignorant parents or officials, much carelessness prevails, and children are allowed to sing at random, and urged to

sing *loud* without being instructed that the process of expelling the air from the lungs properly, gives force to vocal sound, and the little things strain every muscle in their faces and throats in order to be heard. Ignorant of the use of the nose for inhalation—in fact, very many adults seldom think the nose is intended for any other purpose than to require an extra demand for linen—the breath is gasped into the mouth and dragged out with the voice. The consequence is catarrh, and throat diseases are germinated from the first lessons. The evils following are too numerous to mention.

From a stand-point of morality, I deem it necessary to impress the importance of requiring music to be taught intelligently, to establish the fact that intelligence is requisite to appreciate the science. The most profound sciences can be degraded by first impressions. Philosophy can be made a myth, astronomy an exaggeration, and geology worthy of no consideration, if they are disrobed of the dignity attached to their importance. But the primary departments of schools control such evil influences, and the value of these sciences is established beyond a doubt long before they are taken up in a course of study. While music is more spontaneous in practical applications, it is nevertheless a science which requires very judicious treatment in its development. If the lessons suggested pertaining to the laws of health are kept in view, and the benefits derived through the exercises are thoroughly impressed in the primary grades, as they are promoted to the higher grades, they will not then consider it beneath their dignity to pursue the study, or sing, when called upon to do so. If, on the contrary, only the mechanical operation is made prominent, it begets thoughtlessness, and frequently induces an utter disregard for education proper, particularly by precocious musical talent. It becomes a passion. The spirit of the times being sensational, and a seeming mania for public show prevailing, stimulated with the prospect of receiving remuneration, they rush to the foot-lights. Their general ignorance disqualifying them to judge between noise and music, they vie with animals in roaring, and, in short, become lionized for all that is animal within them. The outgrowth of this is vanity and all the attendant vices which can be crowded into a general total to stigmatize and debase science, and to cultivate vocal sluggers. A similar argument may very appropriately be presented against physical culture associated with ignorance.

But, with the safeguards intimated firmly established, thereby protecting the youth in the first steps, future progress is guaranteed. Although excellence may be attained in physical culture without the assistance of vocal exercises, I consider physical culture as indispensable in developing the voice. Their alliance to each other should be particularly pointed out in the grammar grades, in which department I consider a systematic course of progressive exercises, combining physical and vocal culture, as very

essential. In the absence of text-books, movements may be improvised to suit the occasion by the exercise of a little practical judgment. Physiological principles should be kept constantly in mind as an incentive to earnestness, which may be encouraged by explaining the necessity of possessing a sound body in order to produce perfect vibration in the voice; also, the benefits derived by strengthening the respiratory organs, and their association with the organs used directly in producing vocal sounds.

There are occasionally those who cannot sing. They can, however, be very much benefited, if properly managed; and I know of several instances where the inspiration of the exercises has stimulated the vocal organs to healthy action, and restored, as it were, the lost faculty. Alternating singing exercises with enunciation in the speaking voice, is very beneficial. The principal defect to be overcome is in keeping the vowel tones in the back part of the mouth. The roof of the mouth is really the sounding-board; and, unless a special effort is made to keep the vowel tones to the front, free from what may be termed foreign vibration, resonance is impaired and a throaty quality is the result.

Articulation is a very important requisite for singing or speaking. A correct understanding of the use of the consonants in connection with the vowels cannot be too thoroughly studied and made practical. Consonantal sounds are often carried to the extreme by the musical coxcomb, who is particularly anxious to be individualized by putting a *d* or a *t* to the end of a word; and, while the word is incomprehensible in all other respects, that *d* or *t* is pot-hooked on to it.

Of course, we advocate the education of individuality of voice, just so far as it blends with naturalness, for God has ordained that we shall be known by our speech; but we denounce the artificial, mushy attempts at foreign affectation. Let John be John in social converse or public song; and let Mary steal into and steal away the hearts of her hearers in her singing with the same simplicity as she does in conversation.

There is a perceptible difference in the qualities of tone emitted by mature voices, which establishes a classification of registers, and generally the physique corresponds with the quality. The bass or low-toned male voice and the alto or low-toned female voice, are generally heavy, muscularly built persons. They require deep respiration in the production of vocal sounds, as the throat or larynx is naturally large, and the abdominal muscles are used particularly distended. Tenors and sopranos, or the higher male and female voices, are sensitively constructed, and produce tones principally by contraction of the diaphragm. These are what may be termed *pure* voices, and conform naturally to the laws of harmony.

Each voice requires a special training adapted to its individual quality. But, strange to say, pure voices are *very rare*. It may be estimated that not one person in five hundred possesses a pure voice. The predominant

quality of American voices is baritone, or medium male voice, and mezzo-soprano, or medium female voice. While they may produce, in a limited measure, the same degree of harmony as definitely pure voices, the construction of their vocal organs will not admit of the same qualities, although the range of tone may be cultivated in the extreme for more practical purposes. This uniformity of quality establishes the fact, that no extreme measures are necessary to conduct successfully the education of the voice in any department of our public schools. To guard this statement, I might add that there is a tendency among baritones and mezzo-sopranos to aspire to extreme quality not adapted to them in any particular ; and, notwithstanding the advice of superior authority, they frequently persist in the practice. But it is as inconsistent to attempt to transform a baritone into a pure bass or tenor, or a mezzo-soprano into an alto or soprano as it is to attempt to perform a tuba part on a piccolo. Such whimsical notions generally develop in the senior year of the high school. The first symptoms are a terrible distress in the "Pa don't want me to sing bass or tenor," or "Ma don't want me to sing alto or soprano," as the case may be. The disease is abated or aggravated according to the influence of the teacher.

During that period of my life previously referred to, when I became deprived of the use of speech, I visited friends in Wisconsin and became acquainted with a band of Chippewa Indians. I soon learned to understand a great many words in their language. Owing to the similarity of the sounds uttered and their meaning, and when particularly desirous to be understood, they would frequently assist materially with their facial muscles. For example : *Oninda shi ah*—"Where are you going ? If answered, "afar off"—*wausan ;* "near by"—*oma ;* "yonder"—*aweta ;* "pork"—*co-coosh ;* "hot"—*ca-sharkta ;* "cold"—*kar-bee-na ;* "sleep"—*ne-bah ;* "dead"—*nebo.*

In my helpless condition, I often imagined that I detected a meaning in the sounds emitted by birds and beasts. In after years, when I read Longfellow's "Hiawatha," I entered into sympathy with it as none other could unless situated as I was.

The consideration of these ideas is intended to direct your attention to the value of quality in sounds adapted to words, the blending of which should be in consistency with their meaning, or, in other words, the study of natural elocution.

The Tonic Sol-fa system of singing attracted my attention by its classification of the degrees of the scale to comply with elocutionary principles .

1. The solid or tonic.
2. The hopeful or raising tone.
3. The smooth or confirming tone.
4. The earnest tone.

5. The grand or commanding tone.
6. The mournful or pathetic tone.
7. The piercing or tone of alarm.

I see that some of the more recent works on rudimentary music are introducing this plan, and I consider it a step in the right direction, whereby the science of vocal music will form an alliance with the general use of language. The development of musical voices for practical purposes is to be desired, not only for singing, but also for oratory and common conversation. When this is established, the nasal, twanging monotony of speech which we are constantly compelled to hear and pay for, too, from lecturers, lawyers, and ministers, will become obsolete. And our salvation is in the coming generation of public school teachers, whose aspirations are to improve with the times, and manifest by their works an interest in disseminating wholesome instruction to those in their charge, inspired by the thought that each one is a talent in their possession for which they must give an account, to be balanced in "the beyond," with "well done, good and faithful servants," or the reverse.

It were well could this be the incentive to all our works. But, alas! an utter disregard is manifested by many, even those clad in priestly robes. The word of God possessing poetry, melody, the sweetest harmonies, and the attributes of all that is good and holy, is too frequently dealt out according to the *financial* value; and in a similar position are the choir, impelled by the same motives, carelessly and irreverently bawling and mumbling a something incomprehensible even to their nearest neighbor, instead of trying to impress on their hearers the beautiful sentiments contained in sacred songs, thereby infusing a spirit of devotional jubilation in harmony with the occasion, impelling each one present to feel, "it is good for me to be here," instead of provoking an inward and almost a profane feeling of disgust, expressed in musical slang, "*give us a rest.*" Such murdering or execution should be rewarded with a whole rest and a final movement.

While these remarks may strike you as digressing from the subject, such incongruities exist and should be denounced. By reference to them, while imparting instruction to the youth, they can be utilized to advantage by holding them up in derision as evils to be avoided, thereby encouraging simplicity and adaptability to surrounding circumstances.

If special instructors are employed in schools for the superintendence of the vocal department—and they should be—it is the duty of general teachers to stand by them and assist in developing the progress they particularly desire, and not to consider it a recreation to fill in time or an opportunity to shirk other duties in order to get away from those "horrid young ones."

It may not be out of place to suggest a hint to vocal teachers. Lend

your *soul* to the occasion, if you would be successful. Do not let your outside business crowd on your special work and oblige you to skim over your exercises in order to hurry up your *new book*. We do not condemn the publishing of books by teachers, for they are best qualified to do so, provided they keep in mind the importance of introducing only what can be used to advantage, and not devote a few pages to explaining the simplicity of the study of music, and then dive into the labyrinth of musical confusion for the purpose of filling in old stock and exciting the envy of Flat, Sharp & Co.!

Were I to close without directing your attention to the position which we now hold as teachers of vocal music, occupying a place side by side with the most learned scientists of the day, and forming a prominent part in the National Educational Association, I should be justly considered ungrateful; for, while the influence of teachers of ability who have worked with the spirit and with the understanding, has, in a measure, elevated the standard of the profession—which may be considered of sufficient importance in itself to *demand* recognition—we are, nevertheless, indebted to the National Educational Association for the encouragement received, in so promptly assuming our guardianship, virtually saying to us: "Ye are worthy; come up higher."

Tried as in a fire, we have passed through ordeals of development until we have reached substantial value, which cannot be disregarded, This has occasioned our recognition, and the odium of being fit for treason, stratagems and spoils is henceforth attached to the school official who questions the usefulness of vocal music in the public schools.

## TONIC SOL-FA SYSTEM.

Mr. Theodore F. Seward, of New York city, then gave an exposition of the "Tonic Sol-fa" system, by a first lesson to a class of thirty children taken from the Saratoga schools. He afterwards spoke, in substance, as follows:

THE Tonic Sol-fa system is the pure method of teaching vocal music.

1. It is a natural method treating the scale as one alphabet of tones, instead of twelve as is done by the staff.

2. It postpones technicalities till they can be understood by the pupils.

3. It treats the subject in such a way that the school teacher can teach it and not merely the musician, as heretofore.

4. It secures the greatest educational results to the greatest number.

5. It is the best possible preparation for an intelligent understanding of the staff.

The following facts are given as proofs of the foregoing statements:

(a) The system has established itself in Great Britain in spite of the most bitter prejudice and opposition.

(b) It is now virtually the only method employed in the schools of that country.

(c) In response to circulars of inquiry sent out by the New Jersey State Teachers' Association, more than five hundred replies were received from twenty-one different States and Canada, and *every answer sent was in favor of the Tonic Sol-fa system as compared with the staff system.*

(d) Mr. John Evans, Musical Inspector for the Board of (public) Schools of London, reports that, although the choice of systems is left entirely to the preference of teachers, not one of the four thousand teachers of that city uses any system but Tonic Sol-fa.

(e) The cash statistical returns of the Education Department of Great Britain show that the number of schools using the Tonic Sol-fa system has increased during the past year from 3,871 to 6,773.

(f) The London *Journal of Education*, of January, 1885, says:

"To attempt the teaching of singing at sight by any other system than the Tonic Sol-fa sounds nowadays like a contradiction of terms. The Tonic Sol-fa system has left all other competing systems hopelessly behind.

(g) It is recommended by every teacher who has fairly tested it, those who speak in opposition to it being invariably those who have not used the system enough to fully understand it.

This paper excited an earnest discussion, participated in by C. R. Abbott, H. E. Holt, Miss A. R. Mitchell, George F. Green, Mrs. Craft, Professor Thompson, L. W. Mason, and others.

Thursday July 16, the president in the chair. The first business of the afternoon was the election of officers for the coming year, resulting as follows:

President: Dr. G. Stanley Hall, Baltimore, Md.

Vice-President: O. S. Westcott, Chicago, Ill.

Secretary: T. H. Brand, Madison, Wis.

Executive Committee: L. W. Mason, Boston, Mass., T. F. Seward, Brick Church, N. J., O. Blackman, Chicago, Ill., N. Coe Stewart, Cleveland, O., B. Jepson, New Haven, Conn.

The following paper, entitled "A Plea for the Elements of Music in Primary Grades" was presented by Mr. B. Jepson, of New Haven, Conn.:

## *A PLEA FOR THE ELEMENTS OF MUSIC IN PRIMARY GRADES.*

BY B. JEPSON, OF NEW HAVEN, CONN.

At the Madison Convention held one year ago, and more recently at the Convention of Music Teachers, held in New York city, resolutions were adopted, recommending the introduction of music as a regular branch of study in the public schools of the country.

With those resolutions I am, and have been, in hearty sympathy for the last thirty years.

While I am expecting to-day to plead for the "Elements of Music in Primary Grades," I have felt that I could not satisfy my own conscience did I not plead for more of the elements, and less of song singing in *all* the grades.

Until within a few weeks past we have had no means of knowing, even approximately, to what extent music has been introduced as a regular branch of study in the public schools of the country.

As you may be aware, the Hon. John Eaton has instituted an official inquiry into the matter, and before long we shall have all the facts at hand.

So far as heard from, statistics show that there are but few large cities in the United States where music is not taught in some form or other.

This being the case, is it not pertinent to inquire why the results thus far have been so meagre?

Why is it that in some of the large cities where music teachers have been employed for the last thirty years that little, if any, real progress has been made?

Why is it that in some of the smaller cities and towns we so often hear of musical instruction being suspended after a few brief years, or even months, of trial. Fellow teachers, it may not be our fault that there are yet cities and towns where music has not been introduced as a regular branch of instruction, but, once introduced, whose fault is it that the study is not retained?

The patient good-natured public is always ready to be imposed upon, always eager to adopt new theories; but it is also quick to discover and quick to condemn humbugs of every kind and degree. Can the public be blamed for failure in this matter? I think not.

The public believes only in success, and whether we will or not, their verdict is final.

Can parents who are only too anxious to avail themselves of every educational advantage which may benefit their children, be held responsible if success is lacking ? Of course not.

Can boards of education, who are elected to carry out the wishes of the people, and who, as a general rule, rarely legislate in opposition to the popular demand, be held liable? Verily, I think not.

Neither is it reasonable, under ordinary circumstances, to hold principals and school teachers accountable for failure.

Unquestionably the fault lies much nearer home. I have a profound conviction that the blame of failure lies wholly with the musical profession itself.

If we would ingraft the element of vocal music as a regular branch of study in the public schools, we must proceed at once to demonstrate that which we believe to be true, namely, that music has come to be an indispensable factor of human existence;

That it is a necessary element in the education of the young;

That it affords unequaled advantages as a means of physical culture;

That it is a healthful, soul-stirring, life-gaining exercise;

That, as a means of mental discipline, the study of this science is unexcelled, even by the study of mathematics;

That it can be readily taught as a regular branch in the schools;

That no home can be made completely happy without it;

That it is eminently practicable from every point of view;

That a knowledge of the science of music, in our day and generation, cannot be regarded as a mere accomplishment. And, that above all, we seek to discourage and wipe out that species of superficiality which would substitute song singing for elementary drill. If we follow the suggestions of those whose only idea of music is something to relieve the monotony of other pursuits; if we allow music to be used in the school-room merely to spice the general order of exercise;—

In a word, if we use the time devoted to music as a means of recreation *only then we shall fail,* and we *ought* to fail.

Music, as thus regarded, is simply a luxury. The public soon learns to discriminate, and it is not to be wondered at that now and then, under the pressure of hard times, the tax-payers revolt and cut off what they are pleased to denominate one of the ornamental branches.

One of our leading publishers remarked to me, within a year past, that he had become weary and tired of pushing school music books. His testimony was something in this wise:

"Weary weeks, and sometimes months, are spent in importuning school boards and manipulating school authorities. An arrangement is finally consummated by which hundreds, perhaps thousands, of old song books are taken in exchange for the new ones to be introduced.

"Now and then," said he, "in view of prospective sales, we are tempted to 'throw in' a music teacher, and all for what? Not infrequently to see books, music teacher, and all fired out at the end of the first year, in order to make way for a new music teacher and a more favored song book."

For my own part, I see nothing particularly unnatural about this.

The fact is, an exclusive diet of song, induces musical dyspepsia, an incessant craving for something new. Teachers and scholars alike will soon tire of the best song, or the best collection of songs, ever written, and at last their oft-repeated refrain comes to be, "We cannot sing the old songs." Fellow teachers, you may or may not be familiar with this class of work, permit me to give you an illustration.

In the early days of my public school life, I visited a large city in quest of information and methods.

I was directed to several large schools on successive mornings, but was disappointed each time in listening to a programme of well-drilled rote songs.

I finally received information of a regular weekly music lesson to be given in a certain school. Thither I repaired in great haste, arriving half an hour before the time.

At last I was to witness what I had so much desired to see; namely, an exemplification of the science of music teaching in the public schools by a veteran music-teacher.

At the appointed time the music-master came in, took his seat at the piano, and having secured the attention of the class, proceeded to repeat the first line of a popular song as follows:

"Anthem of Liberty, solemn and grand."

Scholars repeat.

The professor repeated the second line. Scholars repeat; and so on for six lines. The professor then sang the first line; the pupils followed suit, etc., etc. This exercise occupied about half an hour. The professor then called for a song which he had previously taught them, after which he bade the principal "Good-morning," with the remark that "the school had done finely." As the door closed, I said to the principal, "Is that all?" "Why, what more would you have?" replied he. I confess, I was dumfounded.

It is a matter of sincere congratulation, that the number of cities and towns in which this sort of thing can be made to take the palce of legitimate work, is yearly diminishing.

Let us rejoice, also, that after many years of waiting, the public school music teachers of the land have been accorded a proper recognition, and have been admitted into full fellowship with this great National Association.

As I have before intimated, the public school music teachers have only

themselves to blame, whether as regards their past, present or future standing.

So long as the vast majority of teachers chose to do a superficial work, and one which might well be considered ornamental rather than useful, so long they were simply tolerated as a sort of "fifth wheel" to the educational coach.

I presume that all who have ever thought of this subject, will agree with me, that public school music teachers, like competent instructors in all other professions, are born, not made. Artists in the profession of music are not necessarily teachers.

They have their legitimate sphere, but, surely, it is not in the school-room. Nevertheless, many of them are there, and oftentimes, by a simple display of personal talent, they succeed in misleading the public, misrepresenting the work of the elementary teacher, and in retarding the progress of that education which in other positions they might well assist in promoting.

In presenting my "plea for the elements of music in primary grades," I feel that I have no special claim upon your attention at this time, except such consideration as a long period of service in this line of public school work may be entitled to. In the absence of any other credential, I beg leave to submit a little of personal history, incident to the organization of my work. Also, I would ask your indulgence, if, while ignoring the finely woven theories of others, my own observations in the school-room shall enter largely into my chosen topic.

In my young manhood, I was thoroughly imbued with the idea that childhood was the time, and the public schools the place, in which to commence a musical education.

I also felt that the practice of note singing, which then prevailed throughout the length and breadth of the land (and which unfortunately still prevails in some parts of the country), should be made to give way to something better, and that much of the time spent in singing "Billy Boy" and "Yankee Doodle" might be better utilized in elementary drill.

I believe, also, that the study of music could be so arranged and adapted to school work, as to place it on a par with other branches.

My greatest anxiety was not to discover some new system of notation, but to perfect that *grand system of the world,* which still prevails, through which, as I believe, the world is to come to a knowledge of the "Art Divine," and by which education of high and low degree may realize their highest aspirations.

In the year 1865, a petition signed by President Woolsey, of Yale, and nearly two hundred other leading citizens, was presented to the New Haven Board of Education, the central thought of which was contained in the following paragraph:

*Resolved*—"That the elements of vocal music be at once introduced as a branch of regular study in the public schools of New Haven, and that a competent teacher be employed at a liberal salary, who shall give his whole time to the prosecution of this work."

It was about this time that the lightning struck your humble servant in the form of an appointment.

I am proud to believe that I was the chosen instrument in first establishing music as a regular branch of study in the public schools of Connecticut.

The work of placing music on the same basis with other branches, was not accomplished without much labor and anxiety. The words "visionary" and "impracticable" were often heard, and the whole enterprise was attended with more or less prejudice and opposition.

The Board of Education, although anxious to carry out the terms of the petition, were nevertheless at a loss just how to proceed.

I was finally permitted to enter the school, with the understanding that the same system of credits, the same rules, and the same discipline throughout should apply to the study of music as to the other branches, and that a specified amount of time should be devoted each day to elementary drill.

At the end of the first six months, sufficient progress had been made to warrant a public demonstration.

The largest hall in the city was engaged, and a public rehearsal was advertised, under the auspices of the Board of Education.

The public came and were pleased with what they saw and heard.

But more especially were they pleased with the efforts of the "six-year-olds" in sight-singing from the blackboard. This was my first "plea for elementary instruction in primary grades."

To the credit of the New Haven Board of Education be it said, that they have never receded from the position then taken, and that their unwavering attitude in favor of music as a branch of education has had a most beneficent influence on other boards, not only inside, but outside, of Connecticut's boundary lines.

If, by some fateful decree, my "plea" at that time had been changed to one for "Songs in Primary grades," it could have been predicted with tolerable accuracy, that long ere this the grand jury of public opinion would have consigned my head to the "basket."

On the 3d of January last, I entered my twenty-first consecutive year of service in the Elm City schools.

At the beginning of my work an attempt was made to do, what always has and always will prove a failure, namely, to "build from the top down."

In other words, it was thought that the study of music was only suited

to the pupils of the High School and the advanced scholars of the grammar grades.

From the upper grades we worked down for several years before reaching a solid foundation. In the meantime, our musical advance upward was in exact ratio to our elementary progress downward.

But it was only when we reached the bed-rock of all elementary work, namely, *grade one,* that we began to realize that in music, as in all other elementary studies, *the foundation for successful building should be laid at the bottom.*

I am well aware that in this statement I may run counter to the opinion of some of my brethren.

Experience, however, has given me a reason for the faith that lies within, and, to use a slang phrase, it is not safe for me to "go back on it." I have not as yet reached the "sere and yellow leaf," that I should live only in contemplation of past labors and past victories; nevertheless, I take solid comfort in knowing that some of my primary pupils, who years ago learned to read notes before they could read words, are to-day leading artists and teachers in the musical profession.

I will be as charitable as possible, and yet I am prone to believe that there is some hidden reason for the opposition to elementary drill in primary grades, which exists here and there.

It must be that this kind of argument emanates from those who are not familiar with primary work, who do not understand how to adapt themselves to little children, or who are prejudiced against the science of music as a branch of study in the public schools.

I may not be quite right in my estimate of the matter, but it has seemed to me as if some of the musical professors placed themselves entirely above the work of primary instruction. Either that, or they have not yet discovered the art of *getting down.*

I am free to admit, that, in commencing labor in primary grades, one of the greatest difficulties in the way to success was the adaptation, not only of myself to the work, but of the work itself to the minds of little children.

In music, as in everything else, one of the most essential qualifications of a child's teacher is one which the grandest conservatories of the world are unable to confer, namely, a profound knowledge of human nature.

And I would here turn aside to recognize this peculiar gift, as manifested in the work of one who believes in, and has been signally successful in adapting instruction to primary grades.

I refer to our veteran pioneer in public school work, Professor L. W. Mason.

If we can be made to believe it, recent discoveries go to show that

mankind in general is retrograding, and that the children in particular are fast becoming demented.

The hook of knowledge must nowadays be baited with some fanciful color, form, or design.

Children of six, eight, and even ten years of age, are occupied with the employments of the nursery.

Music (like other things, it is said), must be taught to the little ones in the "concrete" form, which, being interpreted, means, the "poll parrot" form.

It has been said that there is too much strain placed upon the nerves of primary children, in attempting to teach them the elements of music. In this direction, however, there is a gleam of hope.

The sufferings of the children in attempting to comprehend the position of Do, Mi, Sol, when placed upon the blackboard with ordinary white crayon, have been much alleviated by the substitution of blue Do's, red Mi's, yellow Sol's, etc.

When these fail, little birds of the Do, Mi, Sol variety are used, to quicken childish apprehension, and relieve the attendant mental strain.

To quote the language of a recent correspondent of the *New England Journal* on this subject, "I must say I do not believe that our children are little fools;" on the contrary, I believe that the children of this generation are the brightest and most capable the sun ever shone upon.

If primary children cannot be made to understand the first simple steps in music without recourse to such methods as I have described, then I am prepared to assert that the lack of brains is not all on their side.

Not long since the *New England Journal* quoted approvingly the sentiment of a Boston music teacher to the effect that, "Teaching the elements of music in primary grades was like stopping the prattle of a little child."

This statement of the *Journal* may be true, but it does not tally with my experience.

Never in my life have I entered a primary room to teach the elements of music, in which the children were not reluctant to have the exercise conclude.

Scarcely anything is needed to intensify the interest of children after they find themselves actually reading music.

High over all, and beyond any devices of the teacher is that God-given interest which is ever present in human investigation, and which is equally the inheritance of young children as of the babes of larger growth.

I have in mind at this moment primary rooms in which at every visit the children "stop all prattle" and receive the vocal instructor with shouts and clapping of hands.

Of all other primary rooms in my jurisdiction I may truthfully say,

that while the demonstrations of delight are not quite as emphatic, they are equally sincere.

But says one, "Can very little children be interested from day to day with simple elementary exercises?"

My own experience has been that in the presentation of the elements of music to little children, there is quite as little of monotony and dry detail as in the elements of any other study required.

Think of the multitude of little points which can be made, as for instance:

The Staff, with its lines and spaces to be named, counted, pointed out, and drawn.

Number and shape of all the different notes, so far as it may be found best to introduce them, to be drawn, described, and pointed out, in the same way.

Position of notes and rests on the staff.

Length and pitch of sound indicated by each note.

Number of measures in each exercise.

Number of notes in each measure.

Number of each kind of note counted in reference to its rhythmic, syllabic, and, perhaps, letter name.

Reading of exercises by syllable, and numeral, and, perhaps, by letter.

Various kinds of time, how represented, and how indicated, with time, names and motions.

Application of syllables, vowels, and words.

Add to all this, errors and omissions purposely made by the teacher in writing exercises on the blackboard, and you will have at times a degree of enthusiasm which may be called rollicking fun!

One of the most popular, as well as pernicious forms of musical practice, at the present time, are the so-called "exercise songs."

In these songs the children are taught to accompany the words with appropriate gestures, and these are sometimes sufficiently violent to destroy both words and music.

This style of music in its most progressive form may be witnessed in the performances of the so-called "song and dance artists" of the minstrel profession.

It is a marvel how these people can accompany every sort of contortion and somersault with the music of their own voices.

They do it, however; but the conclusion, as they retire, gasping and panting for breath, is one to excite pity.

If the management of the breath, emission of pure tone, attention to time, careful regard for expression, correct pronunciation of syllables and words, are of any importance in vocal drill, then I must enter my earnest

protest against this combination of singing with gymnastics in the public schools.

Equally reprehensible is the practice of requiring the children to furnish their own music for marching.

Rest assured that both acts will not be well performed. Either they will sing well and march poorly, or march well and sing poorly.

I have heard and read something about injury to voice, etc., in connection with elementary drill in primary rooms.

My own practice with little folks has been, to commence with the first three sounds of the scale, taking any convenient pitch, practicing with numerals, syllables, and words, individually and by class, the teacher giving out each phrase, and class imitating.

This to be followed up with extended exercises embracing two or three phrases of seven notes each, and confined within the limits of the three sounds.

Afterward the first four, the first five, the first six, and eventually the eight sounds of the scale are to be introduced, and followed up with exercises in the same way.

Now, it will be honestly contended that exercises, those limited in range, and those illustrated by the teacher, may not be taught, with far less injury to the voice than would be incurred in the mastery of the latest opera melody, Mother Goose extravaganza, or song from Moody and Sankey.

It is only natural that children should be more easily interested in song singing than with blackboard practice, but, surely, that is no reason why their preference should always be gratified.

As well listen to their insatiable demand for stories, at a period when every moment thus spent should be occupied in teaching them how to read.

Speaking of the preferences of children, I recall an incident which is quite to the point.

Some years ago a distinguished music teacher from New York city, visited the schools of New Haven, for the purpose of viewing the methods in music.

He wrote several test exercises in different grades, but was especially pleased when the infants in one room sang his exercise instantly at sight. He then asked them which they preferred, exercises or songs, and was greatly astonished to hear them vote unanimously in favor of exercises.

It is not probable that the best instructed schools in New Haven, or any other city would always answer in this way.

It is evident, however, that little children may become as deeply interested in the elements of music as in the elements of anything else.

People who would exclude the elements of music from primary grades, talk much of the refining and elevating influence of song.

Surely no one but a barbarian would deprive the little children of good influences; but what about the bad influences of song? Are they not equally potent in the wrong direction?

Have not you and I witnessed song singing before this, from which all the good influences seemed to be absent?

Granted, however, that the circumstances are all favorable, and that good sentiment, good music, and good teachers are everywhere available, what then? Shall we cultivate the moral and the æsthetic at the expense of the theoretic and the practical? Is it not better that they should go hand-in-hand?

All things considered, will it not be safest for us as teachers to adhere very closely to the notation of music? While the ethics of song are often in dispute, by reason of sectarian and other differences, no one was ever heard to doubt the *morality of notes.*

Our mission as teachers is not so much to appeal to the emotional nature of the child as to place in his hand a key by which he may himself unlock the hidden treasure of music.

I do not believe that any special teacher of music, who has a proper conception of his work, will spend much of his time in rote-practice. I think he cannot afford to indulge largely in this kind of pastime, and if he does so, it must be to the neglect of that more important work for which he is salaried by the public.

In reference to this whole subject of rote-practice, I will say that within reasonable bounds, and under proper supervision, I am quite willing that the children in the lowest primary grades shall be enlivened, instructed, or amused (as the case may be) in the daily practice of songs suitable to their age, compass of voice, and capacity of understanding.

I recognize the fact that even the youngest children are susceptible to the charms of song; and that through its potent influence many of life's lessons in reverence, obedience, loyalty, love of the good, the true, the pure and the beautiful are indelibly impressed.

While this is true, it is also true that the child is equally capable in the matter of elementary instruction.

It is universally conceded that a child learns more, proportionately, in the first year of his school life than in any succeeding year. If this be so, the study of music should share with other studies in the advantages of this receptivity.

Moreover, the primary child acquires that confidence in individual singing which rarely comes to scholars of the middle and upper grades.

If, then, the elements of the science can be brought within the easy comprehension of primary pupils, and especially if it can be demonstrated

that the children love elementary practice, *long* for it, and even CRY for it, why ignore their righteous claims?

Why compel them, in the second or third year of school life to take a double or triple dose of notation?

In my own practice, the scholars of the lowest grade are enabled, at the end of the first year, to sing at sight any exercise which can be written within the limits of the scale, without skips, in double time, making use only of quarter and half notes.

If this be so, why deprive them of the opportunity, and, furthermore, why deprive the succeeding grades of an entire school of the advantages thus gained?

In regard to song practice, I would have it understood, that while it *may* occupy its due share of time (be that more or less), *it shall never be unduly exalted over the elementary work, either by the teachers or by any one else in their presence.*

Before concluding I would urge and insist, that in the lowest grade of every school, at least fifteen minutes per day shall be spent in some form of elementary drill, which shall be to the child an actual beginning in his musical education, and one which he need never unlearn in after years.

Fellow music teachers of the public schools, ours is a vast responsibility; and, in concluding my fragmentary remarks, I only wish that I might say something to increase your appreciation of its importance.

In the language of Holy Writ, "We have been set in a large place."

The question is, What can we best do to fill the position?

While the teachers in other branches of the musical profession number their pupils by tens, we count ours by thousands.

Surely it is of the last importance that we should lay well the foundation of musical progress.

If your speaker has achieved any degree of success as a public school music teacher, it has been in the line of regular, systematic elementary drill in all grades, but more especially in the primary.

With a fair experience and some opportunities for observation, my final and deliberate utterance shall be: Omit the practice of music in the high school if you must; but begin, and keep up, systematic instruction in primary grades.

The paper was discussed by Prof. Jones, of Binghamton, L. W. Mason, of Boston, and others.

Mr. Mason followed with some remarks upon "Rhythm," which he illustrated with blackboard exercises.

Friday, July 17, Vice-President O. S. Wescott, A.M., in the chair. On motion of Mr. Jepson, seconded by Mr. Seward, the following resolution was adopted:

*Resolved*, That Dr. Daniel B. Hagar, who has for two seasons so faithfully served the Musical De-

partment, depriving himself of the pleasures associated with the Normal Department, to which he properly belongs, in order to contribute his advice and good works in our behalf, deserves our thanks, and we do hereby tender our appreciation of his services.

On motion of the Secretary, it was voted that an auxiliary committee of ladies be added to the officers in the Department of Music, to consist of: Mrs. Herrchy Eddy, Chicago, Ill.; Miss A. R. Mitchell, Winona, Minn.; Mrs. M. E. Brand, Madison, Wis.; Mrs. E. H. Chamberlain, Kalamazoo, Mich.; Miss Sara Dunning, Malone, N. Y.; Miss O. B. Lee, Ballston, N. Y.; Miss Emily Madden, Argyle, N. Y.

Mr. H. E. Holt, of Boston, then introduced a class of girls from Boston, and illustrated, with great success, his method of teaching vocal music. He spoke, also, as follows:

## *METHODS OF TEACHING VOCAL MUSIC.*

BY H. E. HOLT, BOSTON, MASS.

BEFORE commencing to read the paper which I have prepared, I wish to express my sincere thanks to the officers of this Association for the invitation to speak to you upon a subject which seems to me of vital importance to the cause of music in our public schools. After my experience at Madison last year, this invitation coming from this branch of the National Teachers' Association, was a great surprise to me. In view of the chaotic condition of the instruction in music in public schools, not only in this country, but in others, it becomes us to divest ourselves of all prejudice and study carefully all systems and methods of teaching which may be brought to our notice. In my opinion the wisest of us are yet very ignorant in teaching this subject, and know very little of the possibilities when we outgrow our narrowness and employ the best methods of teaching.

The growth and development of the mind in music in early childhood is marvelous when all obstructions are removed and the mind is allowed to grow and expand through its own activities while playing in the enchanted world of musical sounds. We shall, doubtless, in our shortsightedness, continue to differ with regard to the representation of music. Many will think that a great step forward has been taken when they have made it impossible to teach the complications of the notation, and made it easy to acquire a knowledge of the signs of musical ideas by removing the established, and really the best, representation of the subject in order to present the teaching of that which is not necessary to be known, and which should have nothing to do with the teaching and naming of the subject. The staff notation is the best representation, because it is the most *graphic*, and the only one which represents the whole subject.

We shall make very little progress in teaching music in public schools so long as we confine ourselves to the discussion of such questions as whether or not we shall use the Fixed Do system, the Movable Do system, the Tonic Sol-fa system, or the Buckwheat-note system, or whether we shall attempt to teach music to little children as musicians have learned it through the playing of musical instruments. However we may differ upon these much discussed questions, which are of minor importance, there should be no question regarding the fundamental principles of teaching. There are mental laws underlying the growth and development of the mind, which are as fixed and immovable as the eternal hills, and when

we shape our methods of teaching so as to present this subject to the mind in accordance with these laws, the confusion in musical notations, and differences in opinion arising from our ignorance in teaching this subject will all disappear. Every successful teacher will have his own ways and means of presenting his subject and holding the attention of his pupils; but no teacher is successful in the largest degree who does not make his methods and ways conform to fixed principles in teaching. It is the practical application of the objective principle in teaching music that we need to discuss, and to this I desire to call your attention.

The very name of objective teaching suggests that there must first be an object to be presented to the mind; we must first have a *unit* of thought or *real object* to teach. The first problem, therefore, will be to decide upon our *unit* in music. What is it? We have said that little children first learn to sing as they first learn to talk, by *imitation*, and that the unit or object of thought is the little exercise or song as a whole. Thus we present to the mind our units in music by teaching our pupils to sing these little exercises and songs beautifully, and then showing them the representation in notes. Thus we train the eye to recognize in notes the *succession* of sounds which has been taught to the ear. This is philosophic and sound teaching while viewing the subject from the standpoint of regarding the *unit* to be the exercise or song as a whole. But is not this *rote singing?* The tendency of such a system of instruction is to make musical imitators instead of intelligent thinkers in music, while success in teaching it must depend largely upon the skill and proficiency of the teacher as an expert in singing. If such a system of instruction be called a system of *rote* singing it is rightly named, notwithstanding the pupils learn to apply the syllables to the notes of the exercise and songs learned, and notwithstanding both teachers and pupils deceive themselves by supposing that they are *reading* music. Taught by such a system, little children will appear to the casual observer to be very proficient; they can sing their exercises and songs by note beautifully, but when tested with a succession of sounds which they have never heard they are found to be very helpless. If the object be simply to teach children to sing beautifully on public occasions, and musical experts can be employed to teach the children, a good *temporary* effect may be produced, but it is an expensive luxury and misleading, and should not pass for real education in music.

When we compare the application of the objective principle in teaching music, as here stated, with the same principle as applied by the best educators in teaching language, we find this difference: In language a single word may represent a unit or object of thought, while in music a single sound means nothing, and cannot be taught by itself.

When the little one first learns to say papa or mamma, or learns any sin-

gle word as the name of an object, the word means something because it stands for or represents a certain object, while a single sound can have no meaning in music unless it is associated with other sounds; not only this, but it is impossible to teach a single isolated sound by itself.

The most favorable period in the whole school life for laying a solid foundation for the intelligent rendering of music is the first three years, and here is where we must make a more sensible and intelligent beginning. We need first to appreciate the ability of the little child to learn the elements of music. This we shall never know till we learn better how to present these elements in their simplicity, in accordance with the mental laws, by which the mind acquires a knowledge of all subjects. The supposition has been that little children could not be taught to read music intelligently, simply because it has not been generally and successfully accomplished. The failure has not been on account of inability on the part of the children to learn music, nor on account of the notation with which it is represented, as some would have us believe, but on account of a general ignorance in teaching this subject.

All music has as the basis of its construction two important elements, viz., tune and time, and if we would teach it successfully we must first find the units of thought upon which these two primary ideas are based. The major scale is the *unit* through which we must think in training the mind in *tune*. It contains all intervals found in music except the augmented second in the minor scale. From the intervals in this series of sounds come all the combinations of sounds of which music is composed, and with these simple intervals we can unlock all difficulties found in the study of the pitch of sounds.

WHEN THESE FACTS ARE UNDERSTOOD, AND IT IS FOUND THAT THE REGULAR TEACHERS IN OUR SCHOOLS CAN TRAIN THEIR PUPILS JUST AS INTELLIGENTLY IN SOUNDS AS THEY CAN IN NUMBERS OR COLORS, AND THAT THESE SOUNDS CAN BE MORE EASILY AND SUCCESSFULLY TAUGHT AT AN EARLY AGE THAN EITHER OF THE SUBJECTS MENTIONED, WE SHALL FIND THAT MUSIC AS AN EDUCATIONAL FACTOR IN OUR PUBLIC SCHOOLS HAS NEVER BEEN REALIZED.

To make available the teaching power of the regular teachers for music, they need to be shown how to apply the same intelligent methods in training the ear to sounds as *mental objects* that are used in training the eye to numbers and colors. The ordinary rote or imitative work is not real education in music. The mind gains power only through its own activities, and when the unit of thought—*the major scale*—has been clearly established the pupils should be required to work out *all* problems in the study of intervals by *singing them*. The teacher should only guide the pupil in his thinking and practice until he gains command of the whole subject. This is a self-educating process for both teacher and pupil.

Not a question should be asked by the teacher that is not immediately preceded by the sound to which it refers, and the sounds should be so named that every character used in representing the pitch of sounds should be named by teaching and naming the sound itself before the character is given.

This is a very simple matter, and when we as teachers learn how to do it the question of notation is settled, for no one would think of using any other than that of the staff after having learned to train children in this way. This is all I shall have time to say upon the subject of pitch. I will give a practical illustration of the principles I have set forth, showing how children should be taught to think in sounds at the close of my paper.

I now come to the important element of time in teaching music. In this as well as in tune, we must first find the *unit* of thought upon which *time* in music is based, before we can make an intelligent presentation of the idea to the mind. We find the unit of thought in teaching *time* to be the *whole* measure. But what is a measure?

Dr. Lowell Mason says that "a measure is a portion of time;" but does this give us any tangible idea to present? We find a measure in music to be a group of accents, and no idea of accents can be given through the eye. Through the senses of hearing and feeling, only, can the idea of the different forms of measure be conveyed to the mind.

The various effects in rhythm or time in music comes from the varying accents; and the teaching of time resolves itself into simply *practice of accents*. This being the case, it becomes all-important that these accents should be definitely and distinctively named. Notes give us no idea of the length of sounds, and we shall gain no knowledge of time in music by learning their fractional names and values as notes. They represent pulsations or accents, and they should not be seen by the pupils until these pulsations or accents are established in the mind. Those who have taught the fractional names of notes and rests and measured their values by set motions of the hand all their lives, will be slow to believe that this is all unnecessary, and that there is a much more effective, direct, and less complicated way of teaching this subject. A two-part measure is simply a *strong* accent followed by a weak one, and as soon as children are made to feel these regular recurring strong and weak accents, they are prepared to sing intelligently in plain two-part measures. A three-part measure is simply one strong and two weak accents. A four-part measure consists of a strong accent followed by a weak one and another less strong than the first, and followed by another weak one. A four-part measure is not two two-part measures united, nor a six-part measure two three-part measures. How can these various groups of accents be most clearly presented and named to the mind? We have found that our appeal to the mind

must be through the senses of hearing and feeling; we can only use the eye to assist in regulating the movement. The *real objects* to be taught in both time and tune are *mental* objects, and no idea of them can be given through any picture or drawings that we can make to the eye.

It will be found to be necessary, in order to teach this subject in the best manner, to employ something for a time language which will name these ideas of accent and tone duration distinctly to the ear. In this age of progress the wise man will be very careful how he ridicules any new idea, however absurd it may seem to him, without first giving it a thorough investigation. Nothing stands so much in the way of progress as our own ignorance of the possibilities when the best methods of teaching are employed. Far be it from me to do by word or deed anything that will hinder real progress in music, and all real improvements shall have my hearty support. I make it my solemn duty to investigate carefully all systems and methods of teaching which are brought to my notice. I have always looked with distrust upon all mechanical devices (and their name is legion) invented for the purpose of explaining the mathematics of music to the eye, and all short-hand notations which do not represent the whole subject, and for which there can be no excuse except the ignorance of the teacher. My remedy for all these superfluous things is to produce better results without them.

When the people understand that children are losing the most precious years of their school life for training the eye to the full, true representation of music, and that they are spending this time in acquiring a partial representation which must be abandoned later, and that there is no excuse for this except a want of knowledge on the part of the teacher, they will insist that the teacher shall be better informed. The people have a right to demand that better results shall be obtained, and that, too, with the established notation. I am frank enough to say of my former teaching, that so far as real education in music is concerned which should give children command of their musical powers, with the same certainty of reading music intelligently at sight that they have in reading the language, in the light of present developments it seems to me to have been a failure in comparison to what can and ought to have been accomplished, and I assure you, fellow-teachers, that the fault has not been either with the *children or with the notation.* It will be a genuine surprise to all teachers to see what can be accomplished with little children in gaining a knowledge of sounds when the scale is taken as the unit in thinking, and practice given upon it in its different positions upon the staff the same as children are exercised in numbers and their combinations in studying their tables. This work in sounds can be as successfully done by the regular teachers as in numbers, and the time is not far distant when music in our public

schools will be as successfully taught by the regular teachers as any other branch of study.

At the conclusion of Mr. Holt's exercise, questions were asked and the subject was discussed by Messrs. Pease, of Pawtucket, R. I.; Green, of Troy, N. Y.; Adams, of Newton, Mass.; Holt, of Boston, Mass.; and Seward, of Brick Church, N. J.

## THE RELATIVE IMPORTANCE OF SONG SINGING, AND THE READING OF MUSIC.

BY O. BLACKMANN, CHICAGO, ILL.

THE true position of music in the educational process is near the centre. Why it is not placed there in the educational schemes of the day is because its nature is not understood, or at least, not well considered, neither by the general educator nor by the special workers in this department.

The mind has two parts: a thinking part and a feeling part. The one furnishes him the reasons for things, the understanding; the other gives him motives, the will.

The education of a mind (a man) is the education of these two parts—the Will and the Understanding.

The will is the more interior, more central, more permanent; so to speak, the substance of the mind.

We are all aware that what we know is much more easily forgotten than what we feel and do and love. The latter are of the will.

An examination will, I think, show that the educational work of our times too much tends to the education of the understanding alone. The prominent place which arithmetic takes in the school work, as soon as the child begins to study, and the continuation of it and of similar studies through his course, is instanced as a fact confirmatory of the above statement.

The education of the will is a far more difficult process than that of the education of the understanding. This arises from the fact, no doubt, that it is more interior.

Both the will and the understanding must be educated together. The education of either, and the neglect of the other, is an education only in appearance.

A man all or principally will, with no understanding to guide him, is either so good as to be good for nothing, or so vicious as surely to lead a life mainly of misdeeds. On the other hand, a man of great intelligence and knowledge, but whose motives and loves have had little or no guiding, is open to the common flux of motives, and is most liable to use his knowledge for evil.

I would not, however, have you infer from the above that I assume to have solved the problem of the proper co-education of the will and the understanding. I have got only so far as to be satisfied myself, that such

an education only, is a true education. I begin to see a little what part music is to play in this education.

We will not attempt to define music. While it is based upon a science as exact as that of numbers, whose study contributes much to the education of the rational faculties, still, it is to its power in the domain of the will that we must look for its greatest use.

Vocal music is but one of two great classes, and this only is before us now.

The end in the study of singing is the singing of a song. The end in the singing of a song is an effect upon the spiritual part of the singer. This effect is hidden under the cover of the body, only to be noted in the expression of the face and in the quality of the tone. It is a force brought to bear upon the half of the man which feels and loves.

Thomas Carlyle says: "The meaning of song goes deep."

A song is a poem set to music.

Something of Carlyle's meaning is that when a poem is wedded to music and sung, that whatever meanings in the poem come to the understanding or appreciation of the singer, these go deep into his being and make a permanent impression.

The same poem said with the speaking voice, does not make so strong and so lasting an impression.

If "*the meaning of song goes deep*," how important that the poem contains things good, and that it do not contain things bad. How important it is that the poem which is to be sung, contain much good, for it cannot have much use if it contain but little.

It is manifestly the duty of parents and teachers to see that every poem containing a word that in any way suggests a wrong motive or feeling be either changed or discarded.

The poem should be examined as to its general import and sphere, as well as to the particulars it may contain.

But the power of a good song varies according to its treatment. If it be thoroughly learned, and loved, and often sung, its power is greatest.

Such a song, learned in childhood, and sung till manhood and old age, will not only "be a thing of beauty and a joy forever," but a power forever. The longer such a song is sung the more it becomes a sort of spiritual history of the singer, a recollection of incidents, scenes, associations, impressions, emotions, loves. The records of this history are not written with pen and ink in the mineral kingdom, but on more enduring substance, even the spiritual memory.

Thousands of these are never spoken; they only float through the memory, recalled in the singing of the song only to show that they are still living realities, still a part of the singer's being. "*The meaning of song goes deep.*"

# NATIONAL COUNCIL OF EDUCATION.

SARATOGA, July 10th, 1885.

*Opening Session.*

The National Council of Education met pursuant to a call of the President at 10 o'clock a. m., in the rooms of the Grand Army of the Republic, and was opened with prayer by the President.

The members present were Messrs. Barringer, Bicknell, Brown, Calkins, Coy, Gove, Hancock, Hoose, Hagar, Harris, James, Jones, Payne, Sheldon, Smart, Soldan, Rounds, White, and Tappan.

On motion of Mr. Soldan it was ordered that some person or persons be appointed by the President to report the discussions of the different reports presented to the Council at its sessions.

Mr. Hancock was appointed to report the discussion of the paper presented by the Committee on Hygiene in Education.

Mr. Hoose then presented a report supplementary to a report submitted by the same committee at the last meeting of the Council in Madison, Wis., in 1884, upon the subject, "Recess or No Recess." This report was discussed by Messrs. Gove, Payne, Jones, Soldan, Barringer, Tappan, Hagar, Hancock, Hoose, and President White. It was ordered that the report, with the report of the discussion, be published in the proceedings of the Council.

*Afternoon Session.*

The Council was called to order at 3 o'clock p. m., by the President.

On motion of Mr. Hancock it was ordered that a committee be appointed by the President to report resolutions expressing the Council's appreciation of the character and services of Charles O. Thompson, A. M., Ph. D., who died March 17th, 1885. Messrs. Brown, Bicknell, and Hancock were appointed that committee.

On motion of Mr. Hagar it was ordered that the Council convene at 9.30 a. m., on the morning of the 11th.

A report from the Committee on Normal Education was then presented by Mr. Rounds, of New Hampshire. The subject of the report was "Practice Departments in Normal Schools." Mr. Gove, of Colorado, was appointed by the President to report the discussion. The following members participated: Messrs. Hancock, Rounds, Brown, Hoose, Sheldon, James, Coy, Smart, and President White.

The Council then adjourned to meet at 9.30 a. m., on the 11th.

## SECOND DAY.—JULY 11, 1885.

### *Morning Session.*

The Council convened at 9.30 a. m., and was called to order by the President. Mr. Mowry, of Massachusetts, opened the session with prayer.

After the reading and adoption of the minutes of the preceding day, and of the reports of the discussions made by Mr. Gove and Mr. Hancock, the Committee on State School Systems made a report on "State Supervision of Schools," through the chairman, Mr. Smart, of Indiana. This report was discussed at much length, and, after some amendments, was unanimously approved by the Council. The following members participated in the discussion: Messrs. Mowry, Lyon, Thompson, Eaton, Hoose, Smart, Brown, Gove, White, Rounds, Hancock, Harris, and Tappan. This discussion was reported by Mr. Tappan, of Ohio.

### *Executive Session.*

At the close of the discussion of the report on State Supervision, the Council met in executive session, Mr. Mowry, of Massachusetts, presiding. President E. E. White proposed the following

MENDMENTS TO THE CONSTITUTION.

1. In Article I, Section 1, first line, for the words "fifty-one members," substitute "sixty members."

2. For Section 2, Article I, substitute the following, to-wit: "In the year 1885 the Board of Directors shall elect eight members, four members for six years, two for four years and two for two years; and the Council shall elect eight members, five members for six years, two for four years and one for two years, and annually thereafter the Board of Directors shall elect five members and the Council five members, each member, with the exceptions hereinafter provided for (Section 5), to serve six years, or until his successor is elected."

3. In Article I, Section 3, lines two and three, omit the following words, to-wit: "any department of the Association or."

4. In Article IV, omit the third sentence, "The first nine committees," etc., and add to the second sentence, after the word "committees," the following words, to-wit: "each consisting of five members."

These amendments were adopted by a unanimous vote of the Council.

President White then offered the following resolutions, which were adopted:

1. *Resolved*, That the Executive Committee is hereby instructed to transfer one of the members whose term expires in 1886 to the class of members whose term expires in 1887, and one of the members whose term expires in 1890 to the class whose term expires in 1891.

2. *Resolved*, That the vacancy occasioned by the death of Dr. Charles O. Thompson, of Indiana, remain unfilled for the unexpired term.

The following resolution was offered by Mr. Gove, of Colorado, which, after some discussion, was adopted:

*Resolved*, That reports of the Standing Committees of this Council receive the approval of a majority of the respective committees previous to the presentation of such reports to the Council for consideration,

The executive session then adjourned.

## *Evening Session.*

The Council convened at 8 o'clock p. m., with President White in the chair.

The Committee on Secondary Education, through the chairman, W. A. Mowry, of Massachusetts, made a report on "Academies—their Place and Function." T. B. Stockwell was appointed to report the discussion. An interesting discussion followed the presentation of this report, which was participated in by Messrs. Eaton, Harris, Hancock, Payne, Thompson, Philbrick, Tappan, Mowry, James, Gove, Lyon, and President White.

The President then appointed the following committees:

On Nomination of Officers.—Aaron Gove, of Colorado; Wm. H. Payne, of Michigan; J. H. Hoose, of New York; John Hancock, of Ohio; C. C. Rounds, of New Hampshire.

On Nomination of Members.—T. W. Bicknell, of Massachusetts; N. A. Calkins, of New York; E. W. Coy, of Ohio; E. C. Hewett, of Illinois; H. S. Jones, of Pennsylvania.

The Council then adjourned, to meet at 9.30 on Wednesday morning.

Members present at the sessions of the second day were Messrs. Harris, Smart, Philbrick, Lyon, Hancock, Thompson, Payne, White, Soldan, Calkins, Barringer, Bicknell, Mowry, James, Rounds, Gove, Sheldon, Hoose, Jones, Stockwell, Eaton, Brown, Hagar, Coy, Boyden, and Tappan.

## THIRD DAY.—JULY 13, 1885.

### *Morning Session.*

The Council convened at 9.30, President White in the chair, and was opened with prayer by Mr. Merrick Lyon, of Rhode Island.

Mr. Tappan presented his report of the discussion of the report on State Supervision, which was amended in some particulars and adopted.

After the reading and adoption of the minutes of the last two sessions, the standing Committee on Educational Literature presented a report on "School Reports," through the chairman, Mr. John D. Philbrick, of Massachusetts. The report was read by Mr. T. B. Stockwell, of Rhode Island, and Mr. E. J. James, of Pennsylvania, was appointed to report the discussion. The following members participated: Messrs. Hewett, Rounds, Boyden, Hoose, Philbrick, White, Thompson, Tappan, Stockwell, Gove, Sheldon, Payne, Smart, Hancock, Lyon, Brown, Eaton, and Mowry. The recommendations of the report were amended in several minor particulars and the report was approved by the Council.

The Council then adjourned to meet at 3 o'clock p. m.

### *Afternoon Session.*

The Council convened according to adjournment, and was called to order by the President.

After the calling of the roll, the Committee on Educational Statistics presented a report on "Reforms in Statistics," through the chairman, Mr. T. W. Bicknell, of Massachusetts. Mr. H. S. Jones, of Erie, was appointed to report the discussion. The following members participated: Messrs. Hancock, Sheldon, Stock-

well, White, Thompson, Tappan, Northrop, Boyden, Eaton, Philbrick, Harris, and Mowry. By special invitation of the President, Dr. Henry Randall Waite gave some valuable information acquired through his connection with the National Census Bureau. The Council voted to approve the report.

The Council then adjourned to meet at 9.30 a. m., July 14.

Members present at one or both of the sessions: Messrs. Harris, Smart, Philbrick, Lyon, Hancock, Thompson, Payne, Soldan, White, Calkins, Barringer, Bicknell, Mowry, Peabody, James, Rounds, Gove, Sheldon, Hoose, Jones, Stockwell, Eaton, Brown, Hewett, Hagar, Coy, Boyden, Tappan, Northrop.

## FOURTH DAY.—JULY 14, 1885.

### *Morning Session.*

The Council convened at 9.30 a. m., with President White in the chair, and was opened with prayer by Commissioner John Eaton.

After the reading and adoption of the minutes of the proceedings of Monday, Mr. Stockwell read his report of the discussion of the report on "Academies—their Place and Function," and Mr. E. J. James followed with his report of the discussion on "School Reports." After some minor corrections these reports were approved by the Council.

On motion of Mr. Philbrick, the committee was permitted to withdraw the portion of its report on "School Reports," relating to the limits of age for school census, and, after discussion, the following resolution was adopted, as a substitute:

*Resolved*, That the legal school age be from four (4) to twenty-one (21), and the obligatory school age from six (6) to fourteen (14).

The regular order for the morning session was then taken up, which was an individual report by Mr. W. T. Harris, of Massachusetts, on "Methods of Pedagogical Inquiry." Mr. W. H. Payne, of Michigan, was appointed to report the discussion. The following members took part in the discussion: Messrs. Hall, Harris, Hoose, Tappan, Payne, Eaton, Barringer, Wickersham, and President White. It was ordered that the report of Mr. Harris be printed in the proceedings of the Council, together with the report of the discussion.

*Executive Session.*

At the close of the discussion of Mr. Harris's report, the Council met in executive session, President White presiding.

The following Committee on Resolutions was appointed by the chair: Wm. A. Mowry, of Massachusetts; E. T. Tappan, of Ohio; W. N. Barringer, of New Jersey.

The committee appointed to nominate persons for membership of the Council made a report, submitting the following recommendations and nominations:

1. That the following members be placed in the honorary class under the provision of the Constitution in Article I, Section V: J. C. Greenough, of Massachusetts; Thomas J. Morgan, of Rhode Island; Julia S. Tutweiler, of Alabama; Francis A. March, of Pennsylvania; Henry Barnard, of Connecticut.

2. That the following members, whose terms have expired, be elected their own successors for a term of six years: Josiah L. Pickard, of Iowa; John D. Philbrick, of Massachusetts; Merrick Lyon, of Rhode Island.

3. That Wm. N. Hailman, of Indiana, and Thomas Hunter, of New York, be elected members of the Council for a term of six years; L. S. Thompson, of Indiana, and H. M. James, of Nebraska, for a term of four years, and D. H. Keihle, of Minnesota, for a term of two years.

4. That Mrs. Delia L. Williams, of Ohio, be elected to the place made vacant by the transferring of Miss Julia S. Tutweiler to the honorary list, term expiring in 1889; J. W. Sterns, of Wisconsin, in place of J. C. Greenough, transferred as above, term expiring in 1890; Zalmon Richards, of Washington, D. C., in place of F. A. March, term expiring in 1888; and B. A. Hinsdale, of Ohio, in place of Thomas J. Morgan, term expiring in 1886.

The report was adopted by a unanimous vote of the Council.

The Board of Directors of the National Educational Association reported the following persons elected by them as members of the Council under the provisions of Section 2, Art. I, of the amended Constitution: For a term of six years, George T. Fairchilds, of Kansas, and Robert Allyn, of Illinois; for a term of four years, Sarah E. Doyle, of Rhode Island, and John M. Ordway, of Louisiana; for a term of two years, E. E. Higbee, of Pennsylvania, and J. M. Greenwood, of Missouri.

The Executive Committee reported the following transfers, which were authorized by a resolution adopted at a previous session of the Council, to-wit: W. N. Barringer transferred from the list of members whose terms expire in 1886 to the list whose terms expire in 1887, and D. N. Camp transferred from the list whose terms expire in 1890 to that of 1891.

The Committee on the Nomination of Officers for the coming year made the following report:

*For President*—Daniel B. Hagar, of Salem, Massachusetts.

*For Vice President*—H. S. Jones, of Erie, Pennsylvania.

*For Secretary*—Geo. P. Brown, of Topeka, Kansas.

*For Executive Committee*—The President, Vice-President, and Secretary; Thomas W. Bicknell, Boston, Mass., Emerson E. White, Cincinnati, O., F. Louis Soldan, St. Louis, Mo., and E. C. Hewett, Normal, Ill.

On motion, the following By-Law was adopted:

"Each active member shall pay three dollars annually to defray the expenses of the Council."

On motion it was ordered that the Secretary act as Treasurer of the Council.

It was further ordered that the President and Secretary be appointed a committee to publish, in proper form, the proceedings of the Council for 1885.

The Council then adjourned until 3 o'clock p. m.

## *Afternoon Session.*

The Council assembled at 3 o'clock p. m., according to adjournment, President White presiding.

Mr. Jones, of Pennsylvania, read his report of the discussion of the report of the Committee on "Reforms in Educational Statistics," which was approved.

Mr. G. Stanley Hall then made an individual report on "Results of Pedagogical Inquiry." This was an oral report, interrupted by questions and a general discussion of the different points suggested by the speaker. No record of this discussion was made, but Mr. Hall was requested to prepare a written report for publication in the volume of Council proceedings.

The committee appointed to prepare a memorial of Dr. Charles O. Thompson, made the following report:

## REPORT OF COMMITTEE.

CHARLES O. THOMPSON, A. M. Ph. D., was born September 25, 1836, at Windsor, Conn., and died March 17, 1885, at Terre Haute, Ind. He has been a member of this Council since its organization, and during this period he has been greatly respected and honored by this body, for the ability and wisdom which he has brought to the consideration of all questions of education; for his ripe scholarship and generous culture, and for the valuable contributions he has made toward the solution of some of the most important educational problems that have arisen in recent times.

He was universally beloved for his amiability, generosity, and that large-heartedness that led him to entertain, in a catholic spirit and with kind toleration, the honest opinions and conclusions of others widely differing from his own. He was admired for his rich literary attainments, his brilliant social powers, and that ready repartee and sparkling wit that was "wont to set the table in a roar," but in which there never lurked even the suggestion of a sting. He was reverenced for his sincerity, his loyalty to truth, the courage and fidelity with which he followed the lead of his convictions, the purity of his life, and his eminently devout christian character.

In him the cardinal and the christian virtues were so blended, and these were so harmoniously combined with a naturally acute and highly cultivated intellect, and all were directed and controlled by a purpose so noble, pure, and unselfish, that as a friend he was ever faithful and true; as an adviser he was sympathetic and wise; as a husband and father he was devoted and tender; as a citizen he was patriotic and loyal to every interest of his country; and as a christian he bowed with loving humility and profound reverence and piety to what he believed to be the will of the Master.

His death is felt to be a great personal loss to every member of the Council who had the good fortune to know him only as a member of this body, but for those who knew him as a friend and companion there is no form of utterance that can express the feelings of intense sorrow which the memory of that sad event occasions, and they bow in silent and reverential submission to the will of Him who doeth all things well.

GEO. P. BROWN,
JOHN HANCOCK,
T. W. BICKNELL,
} Committee.

The report was unanimously adopted by a rising vote, the vote being preceded by appropriate remarks by the President of the Council.

The Committee on Resolutions then made the following report:

*Resolved*, That this Council desires to express its cordial appreciation of the courtesy of the Grand Army Post in placing at our disposal its attractive and convenient hall for the meetings of the Council, and we hereby tender our thanks for the same.

*Resolved*, That for the harmony and success of this meeting, as well as that of last year, and for the growing interest in the work of the Council, we are largely indebted to the officers of the Council, and in particular our thanks are due and

are hereby tendered to our retiring President, Dr. E. E. White, for his able and faithful work in planning and arranging for the meetings of the Council and the dignified and courteous manner in which he has presided over our deliberations.

This report was unanimously adopted.

President White presented to the Council the President-elect, Dr. D. B. Hagar, in a few fitting remarks, to which President Hagar responded in his usual happy manner.

The Council then adjourned to meet at the call of the President.

GEO. P. BROWN, *Secretary.*

# REPORTS OF COMMITTEES AND DISCUSSIONS.

## I REPORT OF COMMITTEE ON HYGIENE IN EDUCATION.

### RECESS OR NO RECESS IN SCHOOLS.

[This report was prepared for the Committee by J. H. Hoose, of Cortland, N. Y., who, by request, acted as a sub-committee.]

*Mr. President and Members of the Council:*

Your committee to whom the Council referred, at Madison, the subject of "Recess or No Recess in Schools," submits the following as its second report.

The committee began anew the investigation, the following data indicating the hygienic importance of the subject, and giving direction somewhat to the lines of inquiry:

1. A physician living in the State of New York treated in 1884 a girl aged eight or ten years for irritation of the neck of the bladder; this girl was attending a public school in which the no-recess plan was in operation; the physician held that the case had been aggravated by the girl's shrinking from asking to go out, when she should have gone. The physician judged that there are five or six such cases in every hundred pupils.

2. The investigations that were made in 1884 in the public schools of London, revealed a close relation between the nervous condition of pupils and diseases of the kidneys, such as diabetes, Bright's Disease, and even rheumatism

3. Prof. A. Wurtz, of Paris, died, in 1884, from blood-poisoning, following retention of urine for several hours during a somewhat prolonged railway journey, owing to the want of convenient opportunity for evacuation of the bladder. *The Sanitarian* for August, 1884, in quoting the above account from the *Medical Times*, continues:

"Several times The Sanitarian has had occasion to animadvert upon the danger of the insufficient accommodations for the relief of nature, in public school buildings; that the restraint thereby enforced upon children is a more

common cause of illness than medical practitioners, even, are aware of, we think does not admit of question. The case of Professor Wurtz is suggestive of the restraints common to travel and company, and closer inquiry into the causes of many obscure cases of peritonitis from unaccountable blood-poisoning would doubtless shed much light on this dangerously neglected subject."—(p. 174.)

4. The Westphalian Society of Science and Art published their eleventh annual report in 1884. The report recommends, among other things, that the exercise in penmanship in the public schools should be held in the morning session, "because the light is best at that time, the eyes of the children are not fatigued, and the fifteen minutes' recess follows immediately after."—(*The Sanitarian*, August, 1884, p. 156.)

5. The *Scientific American* for August 30, 1884, p. 129, contains the following:

"After forty-two years' experience, it is now virtually conceded in Germany that physical exercise is not a sufficient antidote to brain pressure, but that where the evil exists, the remedy must be sought in the removal of the cause. Official action with reference to over-pressure has been taken in Prussia, Saxony, Wurtemberg, Baden, Hesse, and Alsace-Lorraine. The commission appointed by the Stadtholder of Alsace-Lorraine recommended that the number of study hours should be restricted to twenty-six a week for the lowest classes of the gymnasium and to twenty-eight and thirty-two for the higher; that the hours of home study should be eight, twelve, and eighteen a week, progressing from the lowest class to the highest, and that six hours a week should be devoted to general physical exercise, including swimming, open-air sports, skating, and excursions. While the existing conditions will be somewhat ameliorated by these decrees, they do not seem to have brought about a final solution of the difficulty. Last year a petition upon the subject, signed by eminent teachers, physicians, and other citizens, was addressed to the Prussian Chamber of Deputies. After setting forth the deplorable effects of the excessive strain upon the nervous system of scholars, it appealed to the patriotism of the Deputies to put an end to the abuse, which, the petition asserts, 'threatens, little by little, to reduce the cultivated classes of society to a state of moral weakness that shall render them incapable of great and manly resolution.'"

6. Retaining too long in the pelvic organs products that should not be retained, causes not only immediate evil, but induces a habit of retention; this habit develops gradually into paralysis of the organs. Fear aggravates this evil.

7. Nervous diseases and diseases of the eyes are caused by retaining too long the secretions of the kidneys. The diseases may be aggravated by heredity.

8. Warm air and the dust that is circulating in school-rooms aggravates diseases of the nasal passages, if they do not induce them.

9. Physical exercise is accompanied with an increased rapidity of the pulse.

The committee based upon the foregoing data a series of questions, which were disseminated widely. The following are the questions, put forth in the form of a circular letter:

"RECESS OR NO RECESS IN SCHOOLS."

"*To the Public:*

"A committee of the National Council of Education made to that body at its meeting held in Madison, Wisconsin, July 10, 1884, a report upon 'Recess or No Recess in Schools.' After discussion, the subject was referred back to the committee for further investigation, to be followed by another report in July, 1885. The subject is of vital importance, touching, as it does, the welfare of pupils in the schools of the country; hence the investigation assumes the widest scope. The committee seeks facts of experience, as well as theories based upon experience; any fact that bears directly or indirectly upon the subject will be very acceptable.

"The scope of the investigation is indicated by the following questions to which answers are solicited from superintendents of schools, principals, teachers. school officers, physicians, professional men of all classes, and parents. The first nine questions are directed especially to superintendents and teachers; the rest of the questions are also directed to any persons who can give any information upon the points raised. The name and address of persons, particularly physicians, who have given attention to this subject, will be valuable aid; copies of reports or papers that discuss this subject are solicited. Send all communications to the sub-committee named below.

"QUESTIONS.

"I. Is the no-recess plan in operation in the schools under your supervision or instruction?

"II. If it is not, has any proposition been made toward the establishment of the plan, and what arguments prevailed against the proposition to introduce it?

"III. Have you returned to the recess plan after a fair trial of the no-recess plan, and, if so, what causes led to the change?

"IV. What condition existed in and about your schools that prompted the officials to abolish the recess, and adopt the no-recess plan, and with whom did the proposition originate to establish in your schools the no-recess plan—with the superintendent and teachers, with the board of education, or with the patrons?

"V. How many hours of continuous confinement within the school-room are required daily, A. M. and P. M., of pupils in the several grades under your no-recess plan?

"VI. What are the precise duties and privileges of pupils that have been substituted for those of the recess in the several grades of your school?

"VII. Are physical exercises as a practical means of retaining and securing health in the school-room, an equivalent under your no-recess plan for the exercise afforded to pupils by an outdoor recess?

"VIII. What effect has the no-recess plan upon the management and government of your schools, especially in the matter of the pupil's habits in conduct?

"IX. Is the no-recess plan extending among the schools in your vicinity?

"X. How is the health of pupils affected in the following particulars by the no-recess plan, so far as your observation and experience extend?

"NOTE.—State explicitly the nature and character of the examinations instituted to arrive at the facts and opinions which you recount in your answer to the questions asked under (*a*) to (*e*) below. Special inquiry is made about those children that have inherited or have developed weaknesses in the points enumerated.

"(*a*) Does or does not the no-recess plan affect the duties and privileges of pupils in such a way as to develop or aggravate in any of them nervous irritation,—revealed by a tendency to, or an absence from, cerebral pains, inability to think or to act or to remember, weariness, coldness of extremities, want of blood in the brain, irritation of the sympathetic system of nerves,—owing to continuous sedentary confinement in the school-room with its heated and perhaps vitiated air?

"(*b*) Does or does not the no-recess plan affect the pelvic organs,—revealed by a tendency to develop or aggravate irritation and disease of the kidneys, bladder, rectum, or by blood-poisoning from retention of urine,—owing to the failure of pupils to comply regularly with the physical necessities under which they rest, to a lack of those physical exercises which tend to keep in a healthy condition the organs enumerated, and to the continuous confinement upon the seats in the school-room?

"(*c*) Does or does not the no-recess plan affect the eye-sight,—revealed by developing or aggravating enfeebled powers of those organs, owing to deficiency of outdoor exposure?

"(*d*) Does or does not the no-recess plan affect the nasal passages and lungs,—revealed by developing or aggravating catarrh or irritation of the lungs, owing to too continuous exposure to the dust, heat and air of the school-room?

"(*e*) How do the physical exercises substituted by the no-recess plan for those of the recess affect, relatively, the rapidity of the pulse of pupils when it is compared to the rapidity developed in the exercises of the outdoor recess?

"Very respectfully submitted,

'J. H. HOOSE,

"Sub-committee on Hygiene in Education."

"State Normal School,
"Cortland, N. Y., January 7, 1885."

The committee has received thirty-two communications that discuss the no-recess plan. These communications represent eleven States; they represent, also, public schools and educators that may be called fairly representative of those in the United States. Of these thirty-two communications, fifty-six per cent of them favor the no-recess plan, and forty-four per cent favor the recess. Only ten or twelve per cent report that the no-recess plan is extending, so far as the writers knew. The no-recess plan has been in operation fourteen years in one place; but in the others the plan has been on trial less than two years on an average. Two communications report a trial of the no-recess plan, and an abandonment of it, or steps to that effect. The no-recess plan was

advocated, originally, in most of the places where it has been introduced by the Superintendent, aided by the teachers; in a case or two, by a member of the Board of Education; in one case, against the opinion of the Superintendent, who favored it, however, after a trial of two years.

The reasons assigned for adopting the no-recess plan summarize as follows: By accident of fire that compelled a shortening of the school day, continued then from choice; much the same as elsewhere; play-ground small; many pupils would not go out at recess unless compelled; the building is tall; the coming together of one hundred boys, from ten to seventeen years of age at recess, in a small space, is sure to be attended frequently by profanity, obscenity, and by personal injury; teachers can not supervise properly all these evils; exposure to cold; opportunities for mischief and disorder at recess; takes too much time to pass the pupils out and in; pupils could not eat their mid-day meal with the family, if they stayed in school until 12 o'clock; it took half an hour each half day to move the pupils out of the building and into it again; a large proportion of the pupils preferred not to go out; roughness on the ground; destroying the spirit of attention and study for the balance of the session; complicated discipline; embarrassed teachers; contaminating associations at recess; places where female teachers can not exercise supervision, especially over boys; teachers can not exercise supervision inside and outside of the building at the same time; teachers can not force pupils to go out of doors in inclement weather; evils of massing at recess large numbers of children under circumstances which forbid their proper supervision and control; danger of weaker children being harmed by the the stronger; teachers disliked to oversee the yards at recess; the teachers were physically unable to control the yards at recess; great lack of accommodations for pupils in the outhouses, when all were out at once, and hence the frequent calls to go out immediately after close of recess; no-recess plan was adopted on account of the extreme cold; inadequate heating apparatus; sickness in the form of violent coughs, sore throats, and other diseases thought to have been caused by exposure at school; to reduce the temptation and the occasion to organize lawlessness on the part of bad boys; muddy yard; no one idea suggested the abolition of the recess; other schools had adopted the no-recess plan; to gain time for earlier closing; the spirit of evil resides in crowds; the crowding together in outhouses of more pupils than can be accommo-

dated; the promiscuous mingling together of pupils in a way that tends rather to encourage immodesty than to protect morals; the bad influence of certain pupils who can not be excluded from school; the prevention of disputes; breaking in upon regular work; advantageous to shorten the school hours, so as to give ample time to play under the eye of parents; deep snows in winter.

The reasons assigned for discontinuing the no-recess plan are briefly: "We believe that the old custom of a short recess in the middle of both forenoon and afternoon was a good one, and should be restored for hygienic reasons" (signed by all the committee of the Board, two being physicians); "the impaired physical condition of the pupils and the inconvenience to patrons prompted the return to the former plan."

Among the miscellaneous remarks contained in the communications are the following:

"We have recess of fifteen minutes each morning in all schools, and ten minutes each afternoon in the primary departments. Our morning sessions are three hours long, and the afternoon two hours. We have no troubles in the yard at recess, and no sickness in the school caused by recess. Our teachers are willing to take care of pupils while in the yard, and do not beg to get out of school at half past three p. m. We think more of having our pupils breathe pure air than to breathe air reeking with disease. We had only five deaths last year in our school, with an enrollment of nearly six thousand pupils; if that can be bettered by the statistics where they have no recess, let me know. Our pupils are seldom sick."

"Theoretically, the no-recess plan is incorrect in principle; practically, with us, it is an undeniable success, physically, morally, and mentally; it is not a matter of one side alone; but the thing is bound to go on; even if only a craze like the roller-skating, and I think the new plan a good one for city and union schools; per contra, let me say that teachers are bound to like it, for it lessens work and responsibility."

"Rest and fresh air are needed by teachers and pupils; the teachers discussed the proposition to adopt the no-recess plan, because they heard of it in some places; the opinion against it was almost unanimous."

"The no-recess plan is in operation here, but I think an outdoor recess would be more conducive to good health."

"We do each year use the old plan of recess for six or eight

weeks after opening of term, during the warmer part of the fall, and because the children, after the long summer vacation, are not accustomed to confinement; we return to the recess again near the end of the year, May."

"The no-recess plan is in operation in our schools only a part of a year; I prefer the no-recess plan for grammar and high-school grades, but not for primary and intermediate grades."

"We have the no-recess plan; pupils are allowed two rests,—one in doors and one out of doors, five minutes each; outdoor rest is where they are allowed to march out, break file, air themselves, and quietly return to their rooms; two things I regard as essential in the no-recess plan or any modifications of it—(1) to assume that the school is a place for study and not a place for play—(2) to allow every pupil to file out once, break ranks, and then return; thus shortening, as we did, the schools fifteen minutes each half-day, the work is not more laborious or too confining."

"We have no recess in our high school, but the time-honored fifteen minutes in all others; we do not use the no-recess plan because after discussion we have concluded that it would injure the health of our pupils and would be no benefit to our discipline; the poor disciplinarians among the teachers, so far as I know, are most earnest in recommending the no-recess plan; a few good men and a few cranks only adopt the no-recess plan—the former from convictions and the latter for policy."

"I take these to be sound principles—that (*a*) publicity is a better safeguard against immorality than seclusion or restriction; (*b*) every wise teacher will know what is going on at recess; (*c*) neither gymnastics nor anything else prescribed by authority and performed by school-rule can take the place of free play."

"The medical society approved of no-recess, so far as I know; they hold the same opinion to-day."

"The only argument against abolishing recess that is produced by those opposed to the no-recess plan that is of any value whatever, is based on the very common evil of poor ventilation in school buildings, but with proper care on the part of the teacher, this is in a large measure remedied."

"The schools in our immediate vicinity are small, the sessions long, and the recess a necessity."

"Our no-recess plan begins with the fifth year in school; no practical teacher would attempt to abolish the old system without introducing a substitute; but there are *pros* and there are *cons* in

the question of recess; if the school-room is small and crowded, with poor facilities for ventilation and poorer yet for letting in the sunlight, a recess every hour is none too much; take rooms where the children have no desks, and where they are banked up in terraces till the upper tier almost bump the ceiling with their heads, and what would be more cruel than to deprive them of their recess? but let the room be large and airy, with comfortable desks, with free access of sunlight and perfect ventilation, and the matter assumes a different aspect entirely; or, let the room be ever so favorably situated and yet be in the hands of a nervous and excitable teacher, one whose health perhaps is failing, or whose burden is too great, or who brings to her work anxiety for sick ones at home, or who does not love her calling, or who is underpaid and is trying to get along on cheap board, no matter what the trouble may be, it will be transmitted to the sensitive minds and bodies of the scholars; then recess must come—it is a necessity to both teacher and pupil—to preach no recess in such a case would be folly; again, let room and teachers be all that could be desired, but the pupils in poor condition, scantily clothed and fed, overworked at home, inheriting weaknesses from parents, indulged in every wish, drinking inordinate quantities of water, or their physical well-being out of sorts from any possible cause—then all our pet theories of no recess go to the winds; the boys will set us crazy with their importunities, and relief comes only in a general recess."

"From what I know of the subject I am decidedly in favor of an unbroken morning and afternoon session, and a long noon intermission in city schools."

"In the ordinary recess one eighth to one fourth of the pupils exercise vigorously; the others do nothing more than to inhale the dust created by those exercising. In our plan every one exercises moderately."

"We have the no-recess plan; at the close of each session, each teacher escorts her school in columns of two to the street where dispersion at once takes place and all go quietly to their homes; in all this it is assumed that the supervision of the plays and diversions of the children are the function of the parents and the home, where the evils of bad associations are not so likely to occur as in the mass on the school grounds where all classes and grades of humanity are likely to be represented. I am surprised at the flippancy with which these moral considerations are dismissed by

some of the partisans of the old recess, when as a matter of fact these evils constitute the most vulnerable points of attack against our public schools. I am also surprised at the inordinate emphasis that is placed upon the assumed importance of the recess as a means of physical training."

"The school hours here are five hours a day, with less than a half hour for recess, and this rule is in force for all grades indiscriminately; I protest vigorously against this arrangement and, if that were required, I think I could show that most of the evils mentioned in your circular letter are produced as a result of the system here practiced; what would you think, for instance, of five cases of chorea occurring in a class-room containing less than two hundred pupils? the truth is that my report bears on most of the troubles enquired about in queries, (*a*)—(*e*), X, of the circular letter, considered as the result of over confinement; I have been a member of the school-board here, but resigned a year ago." [From a physician.]

"Families patronize the public schools under the no-recess plan rather than the private schools."

The exercises substituted for the recess are calisthenics, marching, marking upon the blackboard, vocal gymnastics. Pupils are allowed full liberty to go out of the school-room, some at their own pleasure, others upon a signal of approval from the teacher. The writers are of opinion in most instances that the exercises of the five-minute recess are equivalent to the exercises of the outdoor recess, so far as they aid health. All who have the no-recess plan concur in the opinion that school government is made easier by that plan. The opinion is very uniform from those using it that the health of pupils is not impaired by the no-recess plan, but rather improved; but the experience in this plan has been short, and no facts have been critically collected.

The following quotation gives the results of experiments in the pulse: "Our pupils are not kept in school longer than they were before. They have an hour and twenty minutes in which to go home to dinner. Many go who brought lunches before, when we had only one hour at noon. At the occasions of physical exercise, the doors and windows are opened and all the pure air possible is brought into the rooms. Colds are not contracted at these changes, because the children are exercising vigorously. The temperature of the rooms falls many degrees in cold weather, but quickly rises after the windows are closed and pupils in their

seats. The pulse is accelerated six to ten beats per minute by calisthenic exercises in class, but will increase much more by rapid running out of doors. In a series of experiments made a year ago, I found that, in most cases, the pulse was accelerated more by recess in the open air than by exercises in the class-room, if the children were young. But with girls from twelve to sixteen years, who would not engage in severe sports out of doors, the reverse was true. Several physicians kindly undertook a series of experiments in this connection, and carefully examined all the conditions, with recess and without. They were unanimous in the opinion that the interests of health were on the side of no recess and a long noon intermission."

To give the case of those who favor the old recess would be to cite, in substance, the report of this committee, submitted to the Council in 1884.

The last point of the statistics contained in the communications received from schools where the no-recess plan is in operation, is that which relates to the length of the school-day in those schools. The figures of only a part of those schools will be reviewed, as they illustrate the general custom and tendency.

*Example No. 1*, Troy, N. Y.—The morning session, 2½ hours; afternoon session, 2¼ hours; total school-day, 4¾ hours; 23¾ hours of school per week of five days.

*Example No. 2*, Cadott, Wis.—a. m. session, 2¾ hours; p. m. session, 2¾ hours; day, 5½ hours; 27½ hours per week.

*Example No 3*, Knoxville, Iowa—a. m., average of two departments, 2⅜ hours; p. m., average of two departments, 2⅜ hours; day, 4¾ hours; week, 23¾ hours.

*Example No. 4*, Marengo, Iowa—a. m., average of four departments, 2⅝ hours; p. m., average of same departments, 2⅝ hours; day, 5¼ hours; week, 26¼ hours.

*Example No. 5*, Albany, N. Y.—a. m., 2½ hours; p. m., 2¼ hours; day, 4¾ hours; week, 23¾ hours.

*Example No. 6*, Rochester, N. Y.—a. m., 2½ hours; p. m., average time of two departments 1¾ hours; day, 4¼ hours; week, 21¼ hours.

*Example No. 7*, Yonkers, N. Y.—a. m., average of two departments, 2¾ hours; p. m., same departments averaged, 2 hours; day, 4¾ hours; week, 23¾ hours.

*Example No. 8*, Winona, Minn.—a. m., average of two depart-

ments of time of dismissal, 2¼ hours; p. m., average of same, 1¾ hours; day, 4 hours; week, 20 hours.

*Example No. 9*, Adrian, Mich.—a. m., average of three departments, $2\frac{1}{12}$ hours; p. m., same average, $\frac{11}{12}$ hours; day, 3 hours; week, 15 hours.

These figures show an average of 2½ hours in the a. m. session of the nine examples cited; an average of 2 hours in the p. m. session; an average of 4½ hours for the school-day; and an average of 22½ hours in the school-week. From this time from 5 to 10 minutes are to be deducted daily for the brief rests. With scarcely an exception, the noon intermission in these schools extends from 11:30 a. m., to 1:30 p. m., or 2 hours. The average school-day, as exemplified under the no-recess plan in the nine examples, stands as follows: It begins at 9:00 a. m., and closes the forenoon session at 11:30, broken by a rest of five minutes about the middle of the session. The noon intermission begins at 11:30 a. m., and continues 2 hours. The afternoon session opens at 1:30, and closes at 3:30, with or without a mid-session rest of 5 minutes, often with the rest.

Your committee desires to make, at this stage in this investigation, an historical allusion. Christopher Columbus started on a voyage of discovery; he began and continued his voyage on the theory that he should reach the East Indies; he finally discovered land; he cast anchor and stepped ashore to examine what he had found,—and he had not found the East Indies, but a new continent instead. In like manner your committee has traversed the data relating, theoretically, to no recess in schools; it has found the average school-day under that plan, and it desires to cast anchor, and land upon it for the purpose of considering what it has found.

The average school-day of the no-recess plan begins at 9:00 a. m., and closes at 3:30 p. m.; it is 6½ hours long over all; 2 hours and 10 to 20 minutes of this time are recess; *i. e.*, just ⅓ of the average school-day, from the time it begins until it closes, is given up to rest and recreation. The extreme of this no-recess school-day is reached in a period of 3 hours actually spent in school; yet 5 or 10 minutes of this time are devoted to rest from study; in this case, of the 6½ hours of the entire day, only $\frac{17}{39}$ of it—less than ½—are spent in school. In the presence of these facts, where over half the school-day is spent in recesses, how are we gravitating in school affairs?

The old-style school began at 9:00 a. m., closed at 12:00 m.;

began again at 1.00 p. m., and closed at 4:00 p. m.; 1½ hours of these 7 hours were devoted to rest, the other 5½ hours were devoted daily to actual work; *i. e.*, only $\frac{3}{14}$ of the entire school-day were given up to rest and recreation, as against $\frac{22}{39}$ of it in the extreme case under the modern no-recess plan, where the plan has been established for fourteen years. Return to still earlier customs, those which held school 7 hours per day, and 6 days in the week; here were 33 hours per week of actual work in school, against 15 hours under the last mentioned school organized under the no-recess plan.

These facts reveal the actual problem that is involved in this investigation. It is not the question of recess or no recess in schools, a hygienic question; but is a very different hygienic problem, that of the maximum time that should constitute a school-day of actual work; or, put in another form: What is the maximum time per week that should be spent in actual work in public schools by pupils, in order that they may be most benefitted by the schools? The question could be stated in another form: What is the maximum number of hours per week for which schools should be maintained by public taxation?

Various other questions are raised, indirectly, by the advocates of the no-recess plan, *e. g.*, What is the function of the public school compared to that of the home, touching the inculcation of moral habits among the children of a community? Has the school-society, as massed together in and about the school premises, any function towards establishing in pupils habits that are requisite to the American citizen? What are the relative merits of these two plans of study: (1) That pupils shall do most of their studying under the eye of the teacher? or, (2) That they shall do most of their studying at home?

Thus your committee started out in search of the problem of no recess; it landed upon the average school-day of the no-recess plan. It discovered there that the matter involved in this whole investigation is not one of recess or no recess, but it is one of a very different nature, to-wit: the evolution of the maximum number of hours that shall constitute a school-day (or week) in our public schools. The expression, "no recess," has been the motto flung to the breeze to engage the attention of the public, while the forces at work beneath have unobtrusively shortened the school-day; this work has been done so successfully that the minimum of 3 hours has been reached. Will it go lower still?

Thus your committee has unearthed, in this "wild-goose chase" after no recess, several important subjects relating to schools, as stated above. With those questions your committee has nothing to do, as they have not been assigned to it in due form. Your committee rises with its "occupation gone."

Respectfully submitted,

J. H. HOOSE, Sub-committee.

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## DISCUSSION OF MR. HOOSE'S REPORT.

[REPORTED BY JOHN HANCOCK.]

President WHITE suggested that the physiological reasons for and against school recess be first considered, and then the moral reasons.

Mr. SMART, of Indiana—This subject can not be fully discussed from the data furnished in the report of the committee. Further facts are needed. I think it will be wise to continue the question for another year.

Mr. GOVE—I object to tabling the question. I think the subject should be discussed now. The point which I make is, that no gymnastics can be as beneficial as outdoor exercise. The air in the school-room is poisonous under the most favorable circumstances.

Mr. PAYNE—The report is very fair. It confirms me in the belief of the value of the no-recess plan. The latter part of the report, however, leads me to suspect that the committee wished to get even with those who opposed the report last year.

Mr. JONES—A convention was held last year in England to discuss the question of study under the most favorable conditions. The discussion seemed to lead to the conclusion that more and longer recesses were necessary, and that no exercise was of much value which did not draw away the attention of pupils from their studies. The question there takes the form of more school-hours and more recess.

Mr. SOLDAN—On questions in which one is much interested, he is apt to come to a conclusion, and then only look at the facts which go to sustain that conclusion. I hope to hear from some advocate of the no-recess plan, who shall set forth the reasons for the change. I have, for several years, had control of a school of a thousand pupils, and have investigated this question from the psychological side. The physical side is provided for by gymnastics. On the play-ground, the child's movements are free. Nothing can be more certain than that constrained exercise leads to concentration of blood in the brain. Free exercise leads to diffusion and gives relief. On the moral side, I would much rather trust five hundred boys together than two or three. There is no better supervision of a pupil than that by other pupils. The subject should be decided now. We have all the necessary facts.

Mr. BARRINGER—I live in close proximity to cities which have adopted the no-recess plan. This plan, in great measure, originated with teachers. The object is to get rid of labor and responsibility, to shorten hours and get away earlier from school. It is a plan to shorten school-time and throw the matter of study

and responsibility on the home. It is an entering wedge to make the school hours so short that it may become a question whether we shall have any school hours at all. On the moral side, I have followed up those pupils who did not wish to go out at recess, and have found the reason why. The proper study of the teacher is the child. Can you study him in the school-room? The place to study him is on the play-ground. I am in favor of the English idea of longer recesses and more of them.

Mr. PAYNE being called on by the President for a further presentation of his views, said that he thought there was not sufficient time for the discussion of a report containing so much. This report shows that whether we shall have recesses or not depends on circumstances. There have been no recesses in the schools in the central building in Adrian, Michigan, for fourteen or fifteen years, and there have been no unfavorable criticisms of the plan. In other buildings where the play-grounds are ample, recesses have never been discontinued.

Mr. BARRINGER—Would you, if all circumstances were favorable for recesses, abolish them?

Mr. PAYNE—I would not. It seems to me the shortening of the school-hours is a good thing. We shall make a mistake, however, if the day is shortened, and an immense amount of work is crowded into it.

Mr. TAPPAN—This report has brought into court new matter of great interest. My policy, as superintendent of schools in a town of twelve thousand inhabitants, was to increase the time for outdoor recreation. It is better that pupils be thus kept under the control of the teacher than to be on the street without control. I prolonged the recesses, so arranging them that a part of the schools should have the whole of the school grounds.

Mr. BICKNELL—I think the no-recess plan had its origin in the best of motives. One of these was the immoral practices accompanying outdoor recesses. The question arises, what is the experience of those who have adopted the no-recess plan? The plan gives the child more time at home, more time for free exercise, and for other duties than study.

Mr. HAGAR—My sympathies are on the side of the recess plan. I agree with Prof. Soldan. No exercise in the school-room can supply the place of that outside the school-room. Calisthenic exercises require close attention and are not a relief. To train a child morally we must know what he is. If I know nothing of him except what I learn of him in the school-room, I can not adequately train him morally. I need to know him as he manifests himself on the play-ground. Without the play-ground we lose the opportunity of training children into true republicanism. If there be temptations to evil on the play-ground, there is the place to teach pupils to meet and conquer them.

Mr. HANCOCK—The immoralities of the schools grow out of secret associations of bad boys and girls, rather than by the open recess. There is a limitation to the shortening of the school-hours. Circumstances must determine what is the wise course. In cities the tendency is to shorten hours too much. There is no substitute for the exercise of the open air. Exercise should be spontaneous to be really valuable.

Mr. SHELDON—Some years ago I had charge of a large school for girls. The pupils ranged from six to fifteen years, representing all grades of society. The parents of what are called the best families objected to their children mingling with the others, on account of their personal habits and morals. I found, on investigation, these classes would not mingle any more than oil and water. By careful supervision of the school-yard during play hours, all the troubles were

overcome, and all objections to association removed. I believe in gymnastics. We need to know how to handle ourselves, how to breathe, how to speak. But we need, especially among the smaller pupils, recreation, diversion, spontaneous exercises. The committee say they have found some things they did not expect. These things they do not discuss. For this reason an opportunity should be given for such discussion. The report should therefore go over to another meeting.

Mr. SOLDAN—I think we may meet on common ground. From what Prof. Payne says, the question is one of space, not one of time. According to this view, if we have room for recesses, we should have them; if we have no room for them, we should not have them. The common ground is, that in building school-houses, school authorities should be careful to secure ample space for play-grounds.

Mr. GOVE—I hope that Prof. Payne will formulate his reply to the question of Mr. Barringer. I think the Council can agree in that.

President WHITE—What has been said seems to confirm what I suggested last year, that this is a question of *conditions*. A few weeks ago I visited the schools of which I had charge twenty-five years ago. When I was superintendent, the school hours were three in the forenoon and three in the afternoon, with an intermission of one hour and a half at noon, and one recess of ten to fifteen minutes each half day. Now the upper grades are in session only five hours each day and the lower grades only four hours, with no recesses. Do not the pupils have more time for play, for spontaneous exercise, under the new regime than under the old? Which is the better, to have longer sessions with recesses, or shorter sessions without recesses, but separated by greater intervals? Are the opportunities for immoral practices any less under the new plan than under the old?

Mr. HOOSE—I had formed no conclusion when I began this investigation. After going over the ground very thoroughly twice, I came to the conclusion that the question of recess or no recess did not exist alone. I find the real question is as to the length of the school-day. The shortening of the school-day shows the power of the teachers' fraternity, for it is from teachers that this change has come. But if the teaching is now better than of old, is that any reason why we should cut down the length of the school-day, so that the educational product of the day now shall be no greater than formerly?

# II. REPORT OF COMMITTEE ON NORMAL EDUCATION.

## PRACTICE SCHOOLS IN CONNECTION WITH NORMAL SCHOOLS.

The theory of education has to do with principles, the art with rules. The theory is to be learned by professional study; skill in the art is to be acquired by practice in teaching. And grasp of principles in the science of education, as in all sciences, is greatly aided by subjecting these principles to the test of application.

The prime requisites for success in teaching are capacity, scholarship, and experience, and the earliest experience should be under such careful inspection and guidance as will guard the pupil from loss or harm. To be most effective, this inspection and guidance should be by those who teach the principles of the science and the rules of the art, and the best and speediest success will be assured if, to the instruction of the class-room, be added the guidance of a perfect model; if one learn to do by doing what has been taught in its essential principles and illustrated by worthiest example.

The necessity for training in the practice of teaching was early seen, and the Prussian law of 1819 formally requires the practice school in connection with the normal school. The first normal school on this continent, the school at Concord, Vermont, opened in 1823, by S. R. Hall, had a model school connected with it, and the first State Normal School, established at Lexington, Mass., in 1839, had the same; but though the normal school system of the United States was inspired by the Prussian example, the law requiring a school for practice was not adopted. Hence usage has varied, and a large proportion of the normal schools of the United States have no such department. The lack is in some cases due to the location of the school; in some cases to local prejudice.

It is safe to say that the tendency of opinion in the United States is in favor of schools of application, as model schools, or schools of practice, or both, and abroad the belief in the necessity for them is universal.

There is great diversity in the modes of conducting schools for practice, but there are two general types of organization, toward the one or the other of which all these schools tend. In one, the pupil-teachers are really the teachers of the school, each teaching

a class continuously for a term of several weeks, under the direction of critic-teachers, and then, for another period, changing to another class. Little or no study upon a course accompanies this practice in teaching, instruction being subordinated to practice. In schools of the other type, the pupil-teacher alternates or accompanies periods of study with periods of observation and teaching—practice accompanying or immediately following instruction in principles, as an illustration of the same—and passes by shorter periods of teaching, from subject to subject, and from grade to grade, in logical order. The character of the school is given by its regular faculty. As in schools of the former type, instruction is subordinated to practice; in those of the latter, practice is subordinated to instruction. The former school is organized upon an English model, especially that of the lower and poorer classes of the Home and Colonial School of London; the latter has its analogies upon the continent.

With such a diversity of views as apparently prevails in the United States in regard to the place and work of the school for practice, it is difficult to draw inferences from the results of our experience, which should be accepted as other than personal opinions.

In Europe, usage is more uniform. In a careful study of the courses of study and the organization of normal schools on the continent, your committee find no recognition of practice schools of the type first named. In all, the school of application, used both as model school and as school for practice, is required; in all, this school has its regular teachers for the various grades, and great care is taken that the practice of pupil-teachers shall not in any way work harm or loss to the pupils of the practice school, or injure its character as a model school.

A comparative view of the organization and conduct of work in teaching will be given under four heads:

1. The relation of the principal and teachers of the normal school, and of the teachers of the school of application, to instruction in method.

2. Previous preparation, by study, by observation. and by practice, for work in the school of application.

3. Period in the course in which practice begins, and amount of practice.

4. Modes of correction and criticism.

Under each of these heads the statements given are from official programmes of recent date.

*1. Relation of principal and teachers of normal school and of school of application to instruction in methods.*

The instruction in methods of teaching is given in Austria, Bavaria, and Italy by the teachers of the normal school; in Bavaria and Italy as special lessons in method, in Austria in connection with the regular instruction in the various branches of the course. There is no mention of special teachers of methods in the Bavarian programme, but in Austria a professor of methods and in Italy a professor of pedagogy have places in the faculty. In Belgium, the instruction in methods is given as special lessons both by the professor of methods and by teachers of the school of application.

The instruction in methods is, in all cases, completed by practice in teaching in the school of application. In Bavaria this practice is under the direction of the teachers of the normal school, each for his own branch; in Austria, of the principal of the normal school, the teachers of methods, and teachers of the school of application. Belgium adds to this board of direction the normal-school teacher of the branch to which the lesson relates, while Italy, also adding the normal-school teacher, does not name the principal of the normal school, and apparently gives a much larger influence to the teachers of the school of application.

*2. Preparation by study, by observation, and by trial lessons for the course of training in practice.*

As a rule, there is a course of study in psychology with special reference to its pedagogical relations, in pedagogy, and in some cases of logic, together with a course in the history of education, preceding the period of practice. The study of special methods comes in the same years as the practice in teaching, and probably in the same terms. A very prominent place is assigned observation of lessons given by the teacher of methods, or the teachers of the school of application, and to preparatory exercises in teaching, under careful direction and criticism. In Austria, during the third year, for one hour a week during the first semestre, and two hours during the second, pupils of the normal school observe lessons in the school of application, beginning with the lowest class, and passing in order through all the grades. In this observation the pupils are to be, so far as possible, united. They are to observe carefully and to note their observations. Each pupil is to write a

short resume of each lesson observed. These resumes are made the subjects of criticism in a weekly conference, presided over by the principal, assisted by the professor of pedagogy, the teachers of the school of observation concerned in the lessons, and, during the second semestre, the professor of the special methods of the elementary school. So long a period of preparatory observation is of doubtful utility.

A preliminary period of observation is also prescribed in Italy, Saxony, and Belgium. In most of the programmes, there is special provision for preparatory exercises in teaching, and there is evidence of great care in behalf of the child. Thus the programme for Hamburg says,—"in order that the school of application may not suffer the harm which might be caused by the errors of beginners, the pupil-teachers shall prepare every term for the instruction which they are called to give. For this purpose, there shall be lessons of preparation, in which a detailed plan, drawn up in writing, of the lesson to be given to the school of application, shall be reviewed and corrected by the professor." The Bavarian programme says,—"there shall be an arrangement between the professors in the normal school and the teachers of the school of application so that the exercises of the pupil-teachers shall derange the least possible the regular course of studies of the school of application, and that this may be maintained upon the footing of a veritable model school."

The ratios of these different elements of a professional course vary greatly. Thus in Belgium, the courses of study in school economy, in the biographical treatment of the history of education, in psychology, and in the theory of instruction, are especially excellent. The time devoted to practice in teaching appears to be less than the average, but the provisions for preparation and criticism are most thorough. In Italy the course is well balanced between psychology, pedagogy, and the history of education. In Austria the psychology is altogether subordinate to pedagogy, and the course of training in teaching is especially well arranged. In Switzerland, the history of pedagogy is made especially prominent in Zurich, pedagogy in Berne, psychology in Vaud. The course of training seems to be weak in all three.

There is also difference in the time of beginning pedagogic study. In Prussia, Bavaria, Hamburg, Berne, Italy, and Belgium, it begins with the course; Saxony omits it from the lowest three of

its six classes; Austria from the first year; Zurich from the first, and begins the study of methods only with the fourth year.

*3. Period of the course in which practice begins, and amount of practice.*

The programmes differ in the place assigned to practice. The length of courses of study varies from two years in Bavaria to six years in Saxony. In all other cases, the course is three or four years. Bavaria alone begins practice in its first year; Italy with the second of its three years' course; Saxony in its fifth year; Belgium in the last term of the second of its four years' course; Prussia and Hamburg with their third and last years. In Austria practice begins in second semestre of the third year, and continues through the fourth year. During this year the history of education and school law occupy two hours a week, trial lessons in groups, under direction of teachers of school of application, three hours a week, lessons in presence of all the pupil-teachers under the direction of the principal of the normal school, assisted by the professor of methods of the branch taught, and of that teacher of the school of application concerned, two hours a week. Preparatory conferences, and conferences for criticism occupy two hours a week. Thus five hours a week of practice teaching, two hours of conference, and two hours of study make nine hours of pedagogy, as given in programme.

In Italy, in a course of three years, pedagogy occupies three hours a week through the second and third years, and one lesson a week in the school of application, with criticism, occupies one and one half hours each week through the second and third years. In Belgium practice begins during the third term of second year. During the third and fourth years each pupil is to give six half hours of lessons per week, and these embrace successively all the branches of the course.

*4. Modes of criticism.*

As regards criticism of exercises in teaching, the modes are similar. The general method is by a weekly conference of one hour, under the direction of the principal of the normal school, assisted by the professors of pedagogy and methods, and the teachers of the school of application; and to this board are sometimes added teachers of the normal school engaged in teaching the branches of study from which the lessons are taken. The lessons are witnessed by the classmates of the pupil-teachers giving them, and criticised by these and by the teachers present, although in

Italy the teachers only criticise the critcisms of pupils. This is also the method in the excellent normal school at Fredrickton, N. B. Teaching exercises before the class are a regular feature of the work in training, and these are prepared and criticised as a preparation for the work of the practice school. Resumes of observations, and plans of lessons, are criticised usually by the professors of pedagogy and methods. In all this work of direction and criticism, the teachers of the school of application take a more prominent place in Italy.

Your committee believe that, after so many years of experiment, it is possible to come to some agreement as to a mode of organization of the work of training in the practice of teaching, such as will best fulfill all conditions. It has been their aim, not to theorize upon the subject, but to present the combined results of sound philosophy and carefully tested experience, and they believe great weight should be attached to these results as formulated in ordinances for the conduct of national systems of schools.

From a careful study of various modes of organization and the work of schools for training in the practice of teaching, and from personal observation and experience, your committee would express their conclusions in the following statements of the modes in which this work should be conducted, so as best to advance the interests and guard the rights of pupil-teachers and of the pupils taught. The recommendations made have been carefully tested at home and abroad.

1. A school of application, to be used as a school of observation or practice, or both, is essential to the complete organization of a normal school.

2. In its course of study, this school should cover the ground of the common school, commencing with the kindergarten and extending through the grammar grade at least. It should comprise the high-school course, if practicable.

3. For the work of teaching in this school, careful preparation should be made by a course of professional study, comprising psychology and pedagogy, with special reference to their mutual relations, the history of education, and several principles of teaching. The study of methods, special to the various branches in the course, should accompany the work of the practice school.

4. The principal of the normal school should have the direction of the course of professional study, including general principles of teaching, and the regular teachers of the practice school

should give instruction in the methods of teaching their respective branches. If, for any reason, instruction in methods can not be thus secured, special teachers of methods should be members of the faculty, as assistants of the principal in his professional instruction. Each teacher in the normal school should be teacher of methods, under the direction of the principal, in the branches in which he gives instruction.

5. The practice school should receive its character from its regular and permanent teachers, and should be under their sole care and instruction enough to secure this end. The practice teaching may take a part of each day, but it is best to have periods devoted to professional study in the normal school, without practice, followed by periods in which practice in teaching shall be substituted for professional study. The school of application should be used as a model school while under the sole direction of its regular teachers.

6. Lessons should be first observed as given by the teachers of the school for practice, and schemes of lessons to be given should be carefully reviewed and corrected by the teachers of methods in their respective branches.

7. Lessons given should be observed by other members of the class, by the teachers of the methods of the branches taught, and by the teachers of the practice school concerned in the lessons, and so far as possible by the principal of the normal school. Conferences for criticism of these lessons should be frequently held. Criticisms should be systematically made by the pupil-teachers and the teachers observing the lesson, or the teachers may criticise the criticisms of pupil-teachers merely. From time to time, written reports of the discussions should be prepared and presented.

8. Through at least the first two or three years of the course of the practice school, each pupil-teacher should give instruction, in order, in each subject in the course, and in each grade. Later the pupil-teacher should be assigned to the teaching of special classes and subjects in the several grades for a longer time, to secure familiarity with class-work, and still later should have charge of an entire grade, to gain a knowledge of the problems arising in the conduct of a school, as regards care and discipline, as well as instruction. In these later periods of practice it should be the aim, by making criticisms more and more general, to approximate the freedom in work which would attend the pupil-teacher's work in her own school.

9. There should be a weekly conference, under the direction of the principal of the normal school, and with the participation of the faculty of the normal school and of the practice school, for a free and full discussion of questions suggested by the experience and observation of pupils and teachers during the week.

10. Preparatory conferences should be held by all teachers concerned, under the direction of the principal of the normal school, to make such arrangements for the work to be done in the practice school, that there may be the least possible disturbance of its regular order. To this conference pupils of the highest class in the normal school should be admitted, to give them a better acquaintance with school administration and the duties of teachers.

11. Lessons should be given to classes from the practice schools, before the normal school or classes of the same, as examples of method. For these lessons careful previous preparation should be made, and they should be followed by criticisms by pupils and teachers.

12. Though exercises in teaching classes or sections out of their school-rooms may be recommended for special ends of illustration or instruction, the practice in teaching should be in the schools themselves, under circumstances like those which will attend the future work of the pupil-teacher.

On behalf of the committee. C. C. ROUNDS.

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## DISCUSSION OF MR. ROUNDS'S REPORT.

[REPORTED BY AARON GOVE.]

The discussion of the paper was based on the acceptance of the nine propositions with which it closed. The first proposition was accepted as offered.

In the discussion of the second proposition, Mr. HANCOCK remarked that well trained graduates often leave the normal school to become subordinated to superintendents inferior to themselves in a knowledge of the philosophy of education. As a result, the "enthusiasm of the young teacher is soon quenched." Obliged to learn and follow another's methods "they are soon absorbed in the ocean of indifference, a mass of teachers."

President WHITE—What class of normal schools has the committee in mind?

Mr. ROUNDS—State normal schools.

Mr. BROWN—Why do you consider practice in the high-school grades so desirable to the training of the pupil-teacher?

Mr. ROUNDS—The high-school grades are of great advantage as model schools, or schools of observation, to show the organization of a system of schools, and the modes of instruction and discipline appropriate to older pupils. Normal students from the country are ignorant of the management of a high school; they

ought to be familiar with the organization of high schools; often they are asked to take the position of assistant in a high school, and in ungraded schools we often find advanced pupils pursuing some high-school studies. Of course, none will be allowed to practice teaching in the higher grades except those with fitness for this work.

Mr. BROWN—How do the methods and principles of high-school teaching differ from instruction in the grammar school?

Mr. ROUNDS—The reflective powers are called more into use; the deductive takes in a measure the place of the inductive process.

Mr. HOOSE—Where does the high-school grade begin?

Mr. ROUNDS—The ninth year of the course.

Mr. HOOSE—I am decidedly in favor of the whole course as announced in the proposition. The ninth and tenth grades are in the practice schools at Cortland; the success is apparent. A successful teacher in the lower grades, ignorant of higher-grade work, frequently fails when asked to undertake the latter.

Mr. HANCOCK—I favor the proposition, because the entire work is needed. The primary work is now better done than the high-school work.

Mr. BROWN—At least three transition periods must be considered in the training of childhood, including the transition from oral to book instruction. There is a line of work in primary and grammar departments, which is an exercise of the inductive powers of the mind. Very little of deductive work can be done below the high school. Normal students are often weak, because they have not passed to the consideration and practice of deductive work.

Mr. SHELDON—Is there danger of weakening the primary teacher by drilling largely in deductive methods?

Mr. BROWN—No.

Mr. HOOSE—Our teachers at Cortland are to be called upon to teach all grades. Each student is expected to teach in each one of these ten grades; frequently one fails in one place and succeeds in another.

Mr. ROUNDS—Normal students go out to teach ungraded schools, wherein are pupils of advanced standing, studying algebra, for instance. Again, such students are improved in teaching high-school classes in the school of practice, on account of contact and association with mature pupils.

Mr. JAMES—What is the length of the normal school course contemplated in the report?

Mr. ROUNDS—From two to four years.

Mr. JAMES—Will the same training work be done by the four-year as by the two-year students?

Mr. ROUNDS—Yes, this is true as regards training in the application of principles of teaching. The longer course admits of more practice through a wider range.

Mr. COY being called upon by Mr. Hancock to give his experience in the practice school, said that, while he had charge of the Model High School of the Illinois State Normal University, that school was not used at all as a practice school. He expressed the opinion that it was not necessary to have all of the grades, from the primary through the high school, in order to illustrate with normal pupils the principles of teaching.

Mr. BROWN—With us, a normal student who leaves at the end of the second year, has had no practice beyond the primary grade. When he remains to the end of the third year, practice in the grammar school has been added A four

years' course is provided, in which provision is made for training teachers for high school work.

The second proposition was adopted.

The third proposition was adopted, the chairman being instructed to amend at his discretion.

Mr. BROWN—The ideal normal school ought to have a teacher of methods, who shall be a member of the faculty, and critic-teachers who shall assist the teacher of methods.

The fourth proposition was slightly modified, then adopted.

The fifth proposition was adopted as explained by the committee, after remarks by Hoose, Hancock, Smart, and others.

Mr. HANCOCK—I doubt the efficiency of the organization of a normal school upon the plan proposed. I believe that pupil-teachers should have more direct charge of the school, and should meet the critic-teacher daily. The pupils will be better cared for than when under a regular teacher. The personal power over the pupil lies in the critic-teacher.

Mr. HOOSE—In answer to the oft-repeated question, "What becomes of the pupils while the teachers are practicing?" I wish to say, that normal school pupils are not allowed to experiment with classes. If the work is not well done, the teacher is discharged, and another takes the place. An experience of sixteen years confirms the belief that pupils do not suffer, but come up through the grades as well as pupils under regular teachers.

President WHITE—Can pupil-teachers do as good work as regular teachers, qualified for their work?

Mr. HOOSE—That question touches a group of conditions of fact that rests within one's own knowledge. I shall answer from the point of fact only. In the schools of practice that are under my own supervision, the work is done by teachers in training, who are under the immediate criticism and assistance of critic-teachers. I say explicitly that the work done in our schools of practice is as good as that which is done in corresponding grades of the public schools.

Mr. COY—I have had opportunity to observe and to become acquainted with the practice school of the Cincinnati Normal School, and am sure that the pupils there have not suffered from being taught by normal students. On the contrary, they make more rapid and more satisfactory progress under the charge of those students, with the supervising care of the critic-teachers, than is made in the average city school of the same grade.

Mr. SHELDON—Is it claimed that a frequent change of teachers is better than a permanent teacher in a room?

Mr. HOOSE—Yes; if the permanent teacher be a poor one.

Mr. ROUNDS—My experience in establishing a practice school, and conducting one for many years, has convinced me that the interests of the pupils in such schools demand that they be under the instruction of regular teachers, at least half the time.

The fifth proposition was adopted.

The sixth proposition was adopted, after amendment.

The seventh, eighth and ninth were adopted without discussion.

# III. REPORT OF COMMITTEE ON STATE SCHOOL SYSTEMS.

## STATE SUPERVISION OF SCHOOLS.

*1. On the necessity for supervision.*

It is assumed that it is the right and the duty of the commonwealth or State to provide for a system of common schools, which shall be equally open to all, and which shall be supported by the proceeds of a general tax. The assumption of this right and this duty can be defended only on the ground that the State can secure better results in the education of its children than can be secured by the parent, or by associational enterprises. If the State engages in the work of establishing schools, to be supported by general taxation, it is its duty to make the system general in its scope, and efficient in its character. It must do this, not only as a matter of policy, but as a matter of obligation.

In maintaining its right to levy a general tax for public education, it must do so on the ground that ignorance on the part of some is an abridgment of the freedom of others. If it asserts the doctrine of "*Equal Obligation*," and requires one individual to pay for the education of the child of another, it must base it upon the doctrine of "*Equal Benefit.*"

The State is, therefore, under an implied contract to follow the proceeds of the tax into the school-room, and see that it produces the end for which it was taken. A system of schools, general in its scope and efficient in its character, can not be maintained by the State without efficient supervision.

*2. On the extent of local control.*

It is not enough that the State makes, by its laws, a system of schools possible. The State should compel the location, establishment, and maintenance of a sufficient number of schools for the education of all its children.

It should also fix the minimum time in which schools should be in session, and should prescribe a minimum course of study.

If it were left to each locality to establish schools or not, at its will, the system would in no sense become a general system. A permissive system would soon become no system at all.

In the formation of a school system, and in the management of schools, the State must operate largely through certain local agen-

cies. These agencies must be limited in their operation by certain definite geographical boundaries. In each of these localities the State must provide for the appointment of necessary local agents or officers, by which schools can be established and maintained. While each locality may be left to select its own school officers, the State should require this selection to be made, and it should compel the officers to execute its will in regard to the establishment and maintenance of schools under suitable penalties.

The local authorities may be permitted to exercise discretionary power in respect to those things which do not necessarily affect the quality of the school. Hence, they may be left to locate and construct their own school-houses, and to supply them with furniture and apparatus, through the means of local taxation. But the State should compel this work to be done under such safeguards and restrictions as will secure a sufficient number of houses, in proper locations, with due regard to such sanitary conditions that the health of the children will not be liable to injury. They may be left also to arrange the course of study, with certain limitations, and to make all useful rules and regulations for the thorough organization, management, and discipline of the schools.

The local authorities may employ and contract with teachers, and fix their wages, under such restrictions in respect to their examination and supervision, as will secure for each of the schools of the State thorough and efficient instruction and discipline.

*3. On the executive agents of the State.*

The State should appoint for itself suitable agents or officers, by which a general inspection and supervision of its school system can be secured.

There should be certain state officers, with general supervisory power over the whole system, and certain district officers who, while they may be appointed by local authority, should, nevertheless, be regarded as state officers, and should be appointed for the purpose of executing its will.

*4. On the State Superintendent.*

The State needs an agent to take general supervision of its schools, and of its school funds and revenues. It needs a skillful superintendent, to visit the various localities and awaken interest in public education; to advise subordinate officers and teachers in respect to their duties; to interpret the school law to them; to determine certain matters of general interest, that may be taken to him on appeal, and to inform the law-making power of the State

concerning the condition of the schools, and to suggest such reforms as are needed to make them more efficient and valuable. A commander-in-chief is no more needed for the proper organization, equipment, and management of a great army, than a general superintendent is needed for a great system of common schools..

The efficient performance of the multifarious duties required of a State Superintendent of Public Instruction necessitates experience in the performance of those duties. The successful administration of the office depends also, in a very large degree, upon the confidence which teachers and school officers have in the judgment and in the ability of the State Superintendent. The State Superintendent should, therefore, not be subject to periodic election or appointment. It is believed that the best results will be secured if the selection of a State Superintendent of Public Instruction is left to a properly constituted State Board of Education.

*5. On the State Board of Education.*

An examination of the school systems of the several States makes it apparent that there should be associated with the chief executive school officer a suitable board of control.

This body should form a State Board of Education. It should be empowered to grant life-certificates to persons of superior scholarship and high professional ability; it should exercise supervisory control over the higher educational institutions supported by the State, and especially over the state normal schools; it should examine and license all local officers authorized to examine and license teachers in the various school corporations of the State, and it should have the power to instruct and direct these local examiners in regard to the standard of qualification required of candidates for license, and in regard to the preparation of questions to be used in their examination. It should exercise some control over the management of county or district institutes, established for the instruction of teachers.

The State Board of Education should appoint the State Superintendent of Public Instruction, who, while exercising some independent authority under the laws of the State, should act as the executive officer of the Board.

From the duties required of the State Board of Education, it will be seen that its members should be selected from among the profession chiefly, and the various school interests of the State should be represented upon the Board.

6. *On the subordinate Superintendents.*

In order to secure thoroughness and efficiency on the part of the teachers, their work must be systematically and intelligently supervised. It is impossible for the State Superintendent, or for the State Board of Education, to supervise thoroughly the work of all the teachers employed under a state system. For this necessary work, the State must provide for the appointment of officers, with definite and limited territorial jurisdiction. The work of local supervision can not be left to the non-professional school boards, but it must be performed by professional experts, properly licensed by state authority, and who must be regarded as state officers, carrying out the will of the State, rather than the will of a locality.

Thorough supervision necessitates frequent visitation. The number of schools which one person can efficiently supervise depends very much upon varying local circumstances, among which are density of population, the advancement of the schools, and the condition of roads, bridges, etc. The territorial divisions for this purpose may thus be large or small, as circumstances may require. But, inasmuch as the various townships are generally combined for certain civil purposes; and form counties, it is believed that, in most of the States, each county should form a territorial division, for the purpose of securing supervision of district schools. The County Superintendent should be required to visit and inspect all the schools under his supervision at least twice each year; he should examine and license the teachers, under the authority of the State Board of Education, except those in cities and towns in which a special superintendent is employed; he should have authority to revoke licenses issued by him, for proper cause, but only after a fair trial; he should advise the local school officers in respect to their duties; he should hold county and township meetings for the instruction of the teachers, under the authority of the State Board of Education; he should hear and determine appeals from the decisions of subordinate officers, in certain local matters, and he should be a medium of communication between the State Superintendent and the local school authorities. The same reasons that make it advisable that the State Superintendent should hold his office for a long term, make it advisable that the County Superintendent should hold office for a long term. He should be appointed by the County Board of Education, or by some other competent local authority; but no one should be eligible to the

office whose qualifications for his work have not been attested by some competent state authority.

Authority may be given to certain cities and towns to appoint a superintendent, but so far as such superintendents administer the state system, they should be regarded as state officers, and should be subject to state authority.

7. *On the County Board of Education.*

A County Board of Education should be provided for, which should be formed of representatives of the local school boards of all school corporations, excepting cities and towns having a special superintendent. The chief duty of this board should be to appoint a County Superintendent, but it should meet periodically, for the purpose of consultation and counsel in regard to the proper interpretation of the school law, the selection of text-books, the proper construction of school-houses, and the selection and appointment of teachers.

8. *On additional local school privileges.*

The State may grant power to local coporations to continue the common schools for a longer period than that provided for by the State, and to establish additional schools of a different, or of a higher, character than those provided for in the state system, and to levy a local tax for this purpose, the supervision of such schools being left chiefly to the local corporations.

Respectfully submitted,

J. H. SMART, *Chairman.*
T. W. BICKNELL,
JOHN EATON.

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## DISCUSSION OF THE COMMITTEE'S REPORT.

[REPORTED BY ELI T. TAPPAN, OF OHIO.]

The report being in seven sections, these were considered *seriatim:*

### *Section I. The Duty of the State.*

Mr. MOWRY—If there is a distinctively American system of schools, it is based on the principle that the property of the State can be taxed for the education of the children of the State. Hence follows the right of the State to compel attendance; also the right to supervise all schools, not only those supported by the State, but those that are not. The State has a right to do whatever can be done better by the State than by any other agency. Other agencies may be allowed to exist, but all must be under the paramount control of the State.

Mr. LYON objected to the exercise by the State of any control over private institutions.

*Section II. Extent of Local Control.*

Mr. THOMPSON objected to the definition of "state system."

Mr. EATON suggested "state action" as the term to be used.

Mr. HOOSE—On what theory should the State prescribe a minimum of school studies?

Mr. SMART—If the State levies a tax, it is bound to see that its purpose is realized.

Mr. HOOSE—Why not also a maximum?

Mr. SMART—It is wise to permit every locality to go farther than the limit prescribed by the State.

Mr. EATON—Has not the State as much right to forbid introducing branches beyond a certain point, as it has to require a certain amount of instruction?

Mr. MOWRY—The right of the State is not based on the money consideration, nor on the support given by the State, either from taxation or from a reserved fund, but the State controls and supervises from necessity. There must be general education. It is necessary for the preservation of republican institutions. Hence the State has power over all institutions. If a college teaches monarchy and the subversion of the republic, the State may lay its hand upon it and suppress it.

Mr. BROWN—Every child should be educated for his own sake. The State's power is needed only to enforce this principle. But there is no conflict between the good of the individual and the good of the whole. The idea of supervision goes with the idea of a school; the question is how far should the supervision go into detail.

Mr. LYON—Suppose a private school of three scholars; has the State a right to interfere?

Mr. EATON explained the provisions of the law in California for enforcing the execution of the school law.

Mr. HOOSE objected to the State's prescribing a minimum of instruction.

Mr. GOVE—This means that the State shall make a compulsory educational law.

President WHITE—Would not a prescribed minimum result in lowering the schools in many localities?

Mr. EATON—In some cases, but not generally.

Mr. ROUNDS—In Maine, some years ago, the tendency was generally to go higher, to require more than was wise, not to fall below the prescribed minimum.

*Section III. Executive Agents of the State.*

Mr. MOWRY—The best method of appointing a State Superintendent is by the State Board of Education.

Mr. HOOSE moved to instruct the committee to engraft that in the report. Carried unanimously.

Mr. HOOSE—Should not the Superintendent be subject to the direction of the State Board?

This was objected to by several.

*Section IV. Of the State Superintendent.*

This was passed without discussion.

*Section V. The State Board of Education.*

President WHITE—What control should the State Board have over the examination of teachers?

Mr. HANCOCK—Should every city superintendent have a certificate from the State Board?

President WHITE—Does not the report push the State too far into local school management?

Mr. ROUNDS—The State can not come down to the examination of the local officers.

Mr. EATON—May not certain qualifications be required of local officers? In Pennsylvania the county superintendent is elected by the local boards, but can not act without the approval of state authority.

Mr. HARRIS—The State Board should not have control of any city. The city board appoints a much higher class of men than would the state officers. The State Board of Indiana is of high repute, but it is composed chiefly of city superintendents and the presidents of state educational institutions. In Missouri, the city of St. Louis is on a higher plane than the State as a whole. So, in Arkansas, is the city of Little Rock. The standard of examination in cities is higher than that prescribed by the State; and city examiners should not be trammeled by a State Board.

Mr. LYON—Is there any city whose superintendent of schools must be examined by a State Board?

The President and others knew no such case.

*Section VI. Subordinate Superintendents.*

Mr. HANCOCK—The county superintendent should have power to make and enforce a course of study in his district; as the best course for one county may not be best for another. This power should be under the direction of the State Board.

Mr. TAPPAN preferred putting this power in the county board of education, who should also choose the superintendent.

Mr. HANCOCK—Making a course of study is work proper for an expert.

President WHITE—In Indiana, the superintendent has practically this power, but he submits his work to the county board of education, composed of himself and the township trustees or superintendents.

Mr. HOOSE moved that provision should be made for a county board of education.

Mr. HARRIS objected, preferring the exercise of these powers by the State Board. The county superintendents are elected by the people, and are not all first-class men. The county board, composed of the county judge and several others, will be inferior to the average good teacher. The county superintendent should see that the course prescribed by the state officers is carried out.

Mr. HOOSE withdrew his motion.

Mr. THOMPSON—In one Western State, where there are no county boards, the county superintendent has found it expedient to call to his aid, in making a course of study for the schools of the county, some of the leading teachers of that county. The course thus made was then submitted to a convention of the school officers.

President WHITE advised against the State Board's prescribing courses of study. This should be done by county boards or by local boards, guided by superintendents, who should be experts in education.

Mr. TAPPAN renewed the motion for a county board of education. The plan proposed in Ohio is, to have a board composed of one delegate from every board of education in the county. This would give, in many counties, as many as twenty members of the board. The principal function of the board would be to elect a superintendent. Ohio has had many years of experience, in her cities and towns, of the election of superintendents by boards of education. It has worked well, and it is proposed to extend the plan to counties.

Mr. HARRIS seconded the motion, in view of the proposed method of choosing the members.

Mr. ROUNDS—In Maine, formerly, the county superintendent was elected by a convention composed of the town committees; but the plan was broken up by party politicians, because it took the elections out of their control.

The motion was agreed to unanimously.

*Section VII. Additional Local School Privileges.*

Mr. EATON spoke in favor of permitting great flexibility in the administration of school laws.

# IV. REPORT OF COMMITTEE ON SECONDARY EDUCATION.

## THE PLACE AND FUNCTION OF THE ACADEMY.

1. The academy has performed an important work in the past.

2. The high school is now doing much of the work formerly done by the academy.

3. The high school, as a part of the true system of public education, should be encouraged to the fullest extent.

4. When the high school has done all it can do, there will, probably, still be room for a large and valuable work to be done by the academy.

5. This work will be largely, though not exclusively, in preparing youth for the college.

It is taken for granted that the word "academy" is to be used in this report, not in its ancient sense nor with either of its European meanings, but with the distinctive significance which it has acquired in America.

Yet the force of the word and its present use may be better discriminated by a brief reference to its earlier history.

Webster gives its origin as follows:

"A garden or grove near Athens, belonging to a person named *Academus*, where Plato and his followers held their philosophical conferences. Hence the school of philosophy, of which Plato was head." From this it early acquired the signification of "A place of education of high rank; a college or university."

From this meaning the gradation was easy and natural to its next usage:

"A society of men united for the promotion of arts and sciences in general, or of some particular art or science, as *The French Academy*."

Closely allied to this use and differing but little from it, was its next meaning:

"An institution for the cultivation and promotion of the fine arts, or some branch of science, as *An Academy of Arts*."

Returning now strongly towards the second meaning and use, given above, our fathers planted, at an early day, in the older settlements of this country, institutions of learning, which took the name of *academies*, under the following definition, as given by Webster:

"A school or seminary of learning, holding a rank between a university or college and a common school."

This is the meaning of the word, as we understand it, which is to be used in this report.

There is a sense, however, in which it would be proper to call the *National Council of Education* an "academy." This "Council" is an "association of learned men, proficients in some favorite art or science." Their gatherings are for the "Advancement of opinions and views which ripe scholarship alone could put forth." But we shall confine our discussion to the consideration of the place and function of those "schools or seminaries of learning, which hold a rank between a university or college and a common school." Such institutions obtained a foothold early in New England, and their *present* "place and function" can be determined by a consideration of two distinct points: 1. What place have they held and what was their function in the past? and 2. What changes have occurred which affect the place and function of these institutions in the new order of things?

1. *What place did they hold in the past, or, what was their function in our early history?*

It is to be noted that the early history of education in this country shows that careful attention was given first to the higher and to the secondary education, and afterwards to the elementary schools.

It is generally considered that the Boston Latin School was the beginning of educational institutions in New England, then followed the founding of Harvard College. At the opening of the eighteenth century we find not only Harvard in Massachusetts, but William and Mary's in the Virginia, and Yale in the Connecticut colony, but many good grammar schools established to fit the young men for "ye universitie."

Cotton Mather, in his famous Magnolia, tells us that "when scholars had so far profited at the grammar schools that they could read any classical author into English and readily make and speak "true Latin," and write it in verse, as well as in prose, and perfectly decline the paradigms of nouns and verbs in the Greek tongue, they were judged capable of admission to Harvard College." *

At Boston, Dorchester, Cambridge, New Haven, Salem, Hart-

*Mather's Magnolia, Vol. II, book IV, sec. 4.

ford, and other places, good schools were founded, in which the young men were prepared for college, and generally these schools were called "grammar schools."

It was not till the latter half of the eighteenth century that the first academies, proper, were established and endowed.

Dummer Academy was founded in 1763; Phillips Andover, in 1778; Phillips Exeter, in 1781; Leicester Academy, in 1784; and before the close of the century, many institutions, which in subsequent years played an important part in the educational uplifting of this country, were established.

At that time these institutions were much needed, and were in a short time able to perform a gigantic work. As has been said, education works downward, and not upward. It would be extremely difficult to begin in any state of society with a system of primary schools and attempt to build up from them the grammar schools, and upon them the high schools, then the academies, and finally the colleges and universities. But given the colleges as the first factor, it is easy to furnish competent instructors for academies. The graduates of the academies may then become successful teachers in the grammar grades, and so down to the lowest primary.

It is safe to say that had it not been for the direct results of the early system of academies in New England and elsewhere, the present educational status of the country would have been far below the condition it now has, and the prosperity of the nation seriously diminished. It is worthy of note, also, that the academies, in the early time, were not regarded in the light of private schools, but that in an important sense they formed a part of the system of public instruction.

In 1797 a report was made by the well-known Nathan Dane and others to the Massachusetts legislature, recommending "that no academy should be encouraged by the government unless it have a neighborhood to support it, of at least thirty to forty thousand inhabitants not already accommodated in any other manner by other academies, or by any college or school answering the purpose of an academy." Other provisions are found in this report, guarding the appropriations made by the State.

In a report made to the legislature of the same State in 1859, it is stated that the following principles were established concerning the relation of academies to the State:

"They were to be regarded in many respects and to a considerable extent as *public schools, as a part of an organized system of public and universal education,*

as opening the way for all the people to a higher order of instruction than the common schools can supply, and that they were to be distributed as nearly as might be, so as to accommodate the different districts or localities of the State, according to the measure of the population."

In the same report we find the statement "that no academy endowed by a town or a State is a private school. Academies are all to a certain extent public schools established as such upon a legalized basis of public policy."

In reference to the change of public sentiment since the palmy days of the old academies, especially since the modern public high school has more and more usurped its function in the new system, now so generally in vogue in the country, we desire to quote the following from the fortieth annual report of the Massachusetts Board of Education (p. 198):

"Most unfortunately for the progress of popular education, some who have labored to extend the high school in view of its transcendent utility, have assumed a position of antagonism to academies, calling in question their policy, regarding their day of service as past, and advocating the substitution of high schools in their place."

We desire further to quote from this same report in reference to the province and work of these two classes of schools:

"Now it is clearly beyond the proper province, as it is beyond the ability of nearly all the high schools, conducted as they are or ought to be in these days, to fit boys for 'ye universitie,' as the ancient grammar schools might do, since the standard of college education and of the preparatory schools is as much higher now than formerly as is the rank of the best high schools of our times above the elemental schools half a century ago.

"Far better it is for the pupils who wish to prepare for college, and far more economical is it for the community that the academies should continue to do that work well, than that the high schools should assume to do so great a work for so few in number, while the welfare of the great majority of their pupils is neglected."

What these academies *have* done for the cause of higher education, and thus for general education, may readily be inferred from an illustration. It is a well-known fact that an eminent instructor (Dr. Samuel H. Taylor), in a little more than a quarter of a century, in a single one of these New England academies (Phillips Academy, Andover), had under his instruction about six thousand young men, of whom more than one thousand went directly from his guiding and molding hand to college. What a tremendous influence upon the cause of universal education, not to consider other forces in the community has that one man's teaching in a

single academy had. Furthermore, the entire endowment of this institution was less than one hundred thousand dollars.

Are we not justified in believing that the influence of all the academies of the country during the last one hundred years has been absolutely necessary to the development of the general spirit of education and the general intelligence which marks the American people to-day?

The essential difference between the high school and the academy seems to be that the former is maintained solely and entirely by the municipality, under state control, while the latter is supported, in part at least, by a permanent endowment, and in part by a small tuition paid by the students.

In respect to the academies, "the commonwealth was to share with individuals the character of founders or legal visitors of them. They were to be distributed as nearly as might be, so as to accommodate the different districts or localities of the State according to a measure of population. In this way they were to be placed within the reach of the whole people, and their advantages secured as equally and effectively as possible for the common benefit.*

This was the scope of the academy as originally planned and sustained by the people of Massachusetts, one of the original thirteen States, and in which popular education has always had a strong hold upon the affections of the people. Now, however, the prevailing sentiment, both in Massachusetts and quite generally throughout the country, is different. The progress of the common school has been marked and rapid. The fundamental principle that "the property of the State must be taxed to educate the children of the State," now finds general acceptance in all parts of our Union. The sentiment that the "perpetuity of the republic requires intelligence and virtue in the masses," is very generally received. And since the free discussion of certain questions of common interest which have arisen since the war—especially the public interest occasioned by the problem of seven millions ignorant colored people enfranchised by constitutional amendment—the problem of the education of the masses has assumed new and more vital interest. It has brought before the American people and before the American Congress the great question of national aid to education.

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*Fortieth Ann. Report Mass. Board of Education, p. 209.

The discussion of these great topics has had the effect to enlighten public sentiment, and particularly so to shape public opinion that to-day it is practically granted by a great majority of the American people that a republican government absolutely requires an intelligent citizenship to insure its perpetuity. This is a great gain.

We have now only to discuss the means by which the problem is to be solved. We quote as follows:

"As the wealth and population of the country increased, a demand was made for a higher grade of strictly local schools in all the larger towns, and for that reason the unendowed academies generally and very properly assumed the position and functions belonging now to the modern high school, *which ought always to be supplementary to the common school system.*"*

It is devoutly to be hoped that the time is not far distant when there will be no dispute in regard to the last clause of this sentence.

We shall, then, soon have the common school system established throughout the land, including the district school, ungraded, and the town and city schools, of primary, grammar, and high-school grades.

2. The question now recurs: *What shall be the true place and the true function of the academy when such a state of things shall exist?*

We are to observe, then, that the modern growth of the country is principally *in the large towns.* Whenever the town is of sufficient population, the high school, of proper grade, and desirable excellence, will be established. But there will then continue to exist a difference of views in regard to the course of study in these high schools, and there will continue to be many towns which are not large enough to support a good high school.

Add to this state of things the fact that there will always be a very large number of orphans to be sent away from home to be educated, and that very many families are so situated that the youth will be far better off at some good academy, under good influences, and remembering that these institutions are frequently located in small towns, where the price of living is low, and that the endowments of the academy also largely diminish the cost, and not forgetting that many young men of the best brain-power are solely or largely dependent upon their own resources for their support and their education; and a state of things is described in

* Fortieth Ann. Rep. Mass. Board of Education, pp. 197, 8.

which a wise system of academies may flourish under favorable conditions.

Let us, also, consider for a moment one circumstance already alluded to, which requires further attention.

All friends of the high school have observed that much of the opposition to it, as a permanent institution, comes from the great expense often incurred in the preparation for college of a very few youth, in the smaller high schools.

A town has, perhaps, in its high school sixty or seventy pupils. It must have three teachers. These will generally comprise a man, the principal, who is a graduate of some college, and two women. The principal's salary is probably more than the sum received by both assistants. But, if the school fits for college, nearly or quite all the teaching power of the principal is expended upon the two, or three, or, possibly, four pupils who are pursuing the classical course, while the fifty-six or sixty-six are turned over to the two cheap assistants for nearly or quite all their instruction. Moreover, the character of the instruction given under these circumstances is far lower than can be obtained in our better class of academies.

Considerations like these have influenced many thoughtful men to believe that it will be found necessary for small towns to join together for the maintenance of one high school for several towns, or for the towns to support high schools for a business education, while those youth who desire to fit for college take their preparatory studies in endowed academies.

Whether this will be found in practice exactly the most desirable method of obviating the serious difficulties which now embarrass the question or not, one thing appears to be quite certain, that the people show no disposition to let the academy or any other institution or plan come between them and the most successful working of the high schools in the several large towns and cities of the country.

But is it not also tolerably clear that, taking the country as it is and as it will be, and human nature as it is and is likely to remain, it will prove absolutely impossible for all the towns, large and small, including the urban and the rural population, to maintain high schools of high grade and of the best quality in such universality as to take charge of the *whole* work of fitting for the college course the youth of the entire country, who may desire and who

ought to have a collegiate education, and to do it in a satisfactory manner?

The value of the college course for any young man depends, in large degree, upon the character and the quality of the youth's preparatory training. It is a matter, therefore, of the utmost importance, not primarily that a large number of young men and women receive a college education, but that those who do go to college have the foundation for an education properly laid. With all the high schools that the country maintains to-day, it is still one of the most serious difficulties for the youth to get *properly* prepared for the college.

In the newer sections of the country, the colleges which have been established find it absolutely necessary, in too many cases, to maintain preparatory departments, in order to get their candidates properly fitted.

In most cases these colleges are willing, and, indeed, quite anxious, to dispense with their preparatory department at the earliest possible point of time. Again, in the newer States where at first view it would seem that there is no place for the academy, and, in fact, where there are none, on reflection it will be found that many of the so-called *colleges*, but lately established, are in reality but academies *named* colleges or universities; and, in many cases, would it not have been far better for the liberal friends of education, who have been, it may be, lavish with their money in establishing "colleges," so-called, to have founded and endowed liberally *good academies*. If, in the future, the time should come when a college would be more needed than an academy, the charter could be so amended and enlarged as to embrace the college curriculum.

The public schools of England, at Eton, Rugby, Harrow, Winchester, Westminster, and other places, still perform their good work of fitting young men for Oxford and Cambridge. The early academies of this country, at Andover and Exeter, and the Hopkins grammar schools at New Haven and Hartford, have not yet found their necessity or their usefulness in any wise diminished. Whether they are to be merged into the public high school or not, and it might prove a difficult task to give a good and sufficient reason why a century hence we may not see (1) the public high school far more generally established than at the present; (2) the academy, especially for its true work of preparing young men and young women for the American college, liberally established at

the East, the West, and in the South; (3) the scientific and technical schools, more or less academic in character, doing special but important work; (4) the college, well endowed and equipped in all the States; and (5) a few high-class universities and professional schools rounding out the American system of education—the public doing the principal work, and private munificence completing and perfecting it.

WILLIAM A. MOWRY,
JOHN HANCOCK,
MERRICK LYON,
D. N. CAMP.

I assent, in the main, to the statements and sentiments of the foregoing paper, but would add an expression of the hope and expectation that the free public school system may be so extended and enlarged as to supply, in a large part of the country, at least, the place that has been filled in a few of the States by academies.

E. W. COY.

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## DISCUSSION OF THE REPORT ON ACADEMIES.

[REPORTED BY T. B. STOCKWELL.]

Mr. MOWRY opened the discussion by re-stating the following points:

1. The academy has performed important work in the past.
2. The public high school is now doing much of the work previously done by the academy.
3. The high school is a part of the true system of public schools.
4. When the high school has done all it can do, there will probably still be room for large and valuable work to be done by the academy.
5. This work will be largely, though not exclusively, in preparing youth for college.

The first three points were passed, on being unanimously agreed upon.

Mr. GOVE—I ask that the word "academy" be defined more specifically. I wish to know if it includes all kinds of private schools, especially the various religious or sectarian schools.

Mr. MOWRY—The committee disclaims any purpose whatever to consider the question of denominational schools, and for our definition we shall stand by "Webster" until we get a better.

Mr. PAYNE—Forty to fifty years ago quite a number of academies, after the New England type, were established in Michigan, and they wrought a good work. When the university was established, preparatory schools were started, and, as far as it was possible, these academies were converted into these branches of the university. Finally, these preparatory schools and all of the academies were

absorbed by the free high school, so that not a single academy of the New England type now remains. The preparation for the denominational colleges is mainly done in their own preparatory departments.

Mr. SHELDON—Is the preparatory work for college done as well now as it was by the academies?

Mr. PAYNE—I judge that, on the whole, it is.

Mr. SHELDON—Does not the present high school afford to the whole people better facilities for preparation for college than were given by the academies?

Mr. MOWRY—The report did not raise the question between the academy and the high school as to which is the better, but simply whether there is a place for the former.

Mr. THOMPSON—Years ago academies were found in nearly every county in Pennsylvania. Most of these were incorporated and received aid from donations and grants. In 1864 they were authorized to transfer to city or town authorities their property, provided said authorities would agree to keep up a high grade of instruction. As a result, there was quite a change in the character of the work done. It was more general, less preparatory work for colleges, that being transferred to the college preparatory departments. On returning to the State, I find that these academies, or similar institutions, are quite common; evidently created for the special work of fitting for college. So far as my knowledge goes, very few college students come from high schools.

Mr. EATON—This question involves the idea of the *extent* of the education to be provided, and the reason *why* we educate. I find public education to be largely the outgrowth of the religious ideas of the people. The early New England idea, that every soul stands on equal footing with every other soul before its Creator, *compelled* the fathers to make such provision as they could, so that each one could have the same chance to be fitted for his duties, and the State was the only agency that could be utilized to carry out this idea. Still, there must continue to be work for the academy and college to do for the religious sentiment, and the State must recognize it by giving them her protection. The Council ought to recognize the proper place of the academy in our educational work, so that the people will recognize it more fully, and endow it as fully as they have the theological seminaries and the colleges. Scholarships should be founded in these academies for deserving youth of both sexes.

Mr. TAPPAN—Of the thirty or forty academies founded in Ohio, seventy to eighty years ago, only two or three now remain as such. They have developed into colleges, or been turned into high schools. Of the forty or more colleges in the State, not more than sixteen are properly entitled to be called such. The others are not doing real college work, and they are not doing preparatory work for the real college. Of the sixteen real colleges, all but one have preparatory departments, and that one, the University of Cincinnati, has the city high schools for its feeders. To-day the work of the old academies is being done by the smaller colleges and high schools, and the preparatory departments of the real colleges. An inquiry several years ago revealed the fact that the great majority of the students in Ohio colleges were fitted in their preparatory departments; the high schools furnishing only a very small number, not over five per cent.

Mr. EATON—Is that due to the *omission* of Greek from the high-school curriculum?

Mr. TAPPAN—That is only a partial explanation. The fact is, that there is not a demand upon the high schools to fit for college. They can not afford it, except in large centers, where the number of pupils is large.

President WHITE—What percentage of the students in Ohio colleges come from the country including the villages or smaller towns?

Mr. TAPPAN—It is my impression that the smaller number of these students come from the country.

Mr. HANCOCK—I think that the larger number come from rural communities.

President WHITE—I have the impression that the investigation made some years ago showed that the majority of the students in the colleges of the State came from localities that had not good high schools. Certainly, a great majority of the youth of the State are not within easy reach of good high schools, and the high schools in the cities do not and can not afford country youth the best or most economical facilities for preparing for college. The smaller colleges (so-called), the normal schools, and the preparatory departments in the colleges are doing a large part of the work of fitting youth for college—the work once done by the academies—and, in a sense, they are academies. These supplement the high schools, and must continue to fill this place.

Mr. HARRIS—The demands now made by the colleges upon the lower schools can not be well met by the high school. The high-school education is, and must be, based largely upon the three moderns, science, history, and language, which the college has not yet accepted as a basis of its training. Hence, the high school pupils have to go directly into life-work from the school, and will continue to do so, until the colleges shall change their requirements for admission, as Harvard has already begun to do. The present college demands can only be met by academies and special high schools, like the Boston Latin School. If the colleges will give the three moderns an equal place with the ancients, and thus give the high schools an equal chance with the endowed academies, the former will, in my opinion, do better preparatory work, and the academy would be less in demand. But there will continue to be a place for academies and private schools, to act as a corrective to the public school, to keep it in a state of proper subordination. They will also be needed to show the advocates of the *system* in education, that there are sometimes shorter roads; that flank movements are sometimes admirable in educational progress.

Mr. JAMES—My experience, both as principal of a high school and as an instructor in a college, has shown that the two institutions can not work successfully side by side; that where the attempt has been made, it has been to the detriment of the high school. In Philadelphia, the high school is not fitting a boy for the university. The real question is not, Can the academy and the high school work together? but, Which one shall we have?

Mr. TAPPAN—If the University of Pennsylvania would accept the graduates of the high school, would that remedy the matter?

Mr. JAMES—I think not, and, besides, the traditions are all against such a course.

Mr. PHILBRICK (being called upon)—I would ask Professor Payne as to Michigan, if there are not large areas in Michigan that do not have good high schools, and, if so, in such areas, would not the academy meet the demands better than the high school? It is my opinion that the academy still has a place and a work which the high school can not well do, and, at the same time, the high school has a place which the academy can not fill. The experience of Essex County, Mass., shows that most of the pupils in the high schools would not have gone to academies. I think that the high schools in large cities should be reorganized on the line of specialization, as classical, technical, and modern. The Boston

system illustrates the value of this division. As we advance in civilization, we must more and more multiply the *kinds* of schools.

Mr. MOWRY—The principle, that the State shall do only what the people can not do as well, applies here. If academies can do certain work in education better than high schools, and the people are willing to pay for it, then there is no reason why the academy should not exist. I also claim that the two kinds of schools act and react upon each other, to their mutual advantage. Each is thus made better than it would be alone.

The President here announced that the discussion had filled more than the allotted time. The report was approved by a unanimous vote of the Council.

# V. REPORT OF COMMITTEE ON EDUCATIONAL LITERATURE.

## SCHOOL REPORTS.

I. The origin of our state school reports, which antedates that of local reports, is coeval with the origin of the state school funds. The just distribution of the proceeds of these funds for the benefit of schools rendered it necessary to obtain certain statistical facts, well authenticated, such as, the number of children of school age for each school district or other school precinct of which the State is composed, the number attending school, the disposition of the school moneys, the amount of local school revenues, etc. The first school reports, therefore, were purely statistical and financial in character. This was the case in Connecticut, the first of our States to establish a state school fund. Such reports were made by the manager of the fund many years before provision was made for a state chief of the common school system, charged with the duty of reporting upon its condition. So, at a later period, in Massachusetts, simultaneous with the act creating a state school fund, was the act providing for statistical returns from the school committees of the towns. The first issue of the abstract of these school returns, by the Secretary of State, was printed on royal quarto sheets, and is a curious landmark, as showing how rudimentary and imperfect were the first attempts to exhibit the condition and workings of a school system by printed reports. Three years later, on coming into office as Secretary of the Board of Education, and virtual Superintendent of Public Instruction, Horace Mann compiled the abstract in an octavo volume of upwards of three hundred pages, this being his first task as author of school reports, in which sphere he afterwards became so preeminently conspicuous; and, ever since, the statistical portion of the Massachusetts Report has borne the title—"An Abstract of the School Returns, made by the School Committees of the Several Towns and Cities in the Commonwealth." Mr. Mann's first report, which was simultaneously submitted, contained no tabulated statistics, and was issued separately, in a pamphlet of fifty pages. This document was a statement, for the most part, of certain classes of facts and important views relating to the con-

dition and wants of the school system, derived from other sources as well as from the statistical returns, its design being not merely to reach and influence state and local officials, but to be somewhat largely distributed among leading citizens in all walks of life; while the abstract, being intended more especially for the use of legislators and other officials, was printed in more limited numbers. This continued to be the plan of reporting for upwards of a decade, except that the volume containing the statistical abstract was accompanied by copious extracts from the written reports of school committees. These two documents embodied the essential elements now deemed requisite in every good report, namely, statistical information on the one hand, and, on the other hand, statements, observations, suggestions, and views, relating to the interests concerned. But although the complete report requires these two entirely different classes of statements, the chief object of all reports alike is to disseminate the most useful information in the best form.

Our system of education, like our government, is of the people, for the people, and by the people. It is for the benefit of all children alike, and is wholly dependent, both for support and control, upon the will of the people, expressed either directly, by the popular vote, or indirectly, through legislatures, boards of control, and the officials clothed with authority by these bodies. Hence the necessity of diffusing accurate and detailed information as to the condition and working of the school systems, and also in respect to the best means of promoting their progress and development, not only among legislators and public school officials, but among the people at large.

To insure the maximum utility of this two-fold information, it must be as fresh as possible; that is, it must be gathered up and made available at short intervals,—in general, once in each year. Accordingly, we find that, with the development and growth of our state systems of schools, the part relating to reports has vastly increased in necessity, importance, and excellence. The aggregate of the printed school documents, national, state, and local, issued annually in the United States, has become very great, whether considered as to number or to mass of printed matter. The school statistics exhibited in a large proportion of these reports have become accurate, full, well-arranged, and digested; while the non-statistical portions of the documents comprise most of the current wisdom relating to school interests.

In this branch of educational economy, our country is clearly in the lead, as has been shown in all the universal expositions of which education has formed a part. Foreign authorities agree in recognizing the superiority and great utility of this feature of our system.

The peculiar merit of this feature of our system has been pointed out and elucidated by M. Buisson, in the remarkable chapter on School Statistics, in his Report on Education at the Vienna Exposition, and also in his no less valuable chapter on the same topic, in the Report on Education at our Centennial Exposition, by the French Commission, of which he was president. This eminent educator attributes the success of our statistical reports to two causes: (1) because the aim is to make them the medium of publicity to those results in which public opinion is most interested; and (2) because they have fixity and uniformity in form and substance, although liberty of change every-where prevails.

It is important to add, however, that we find abroad individual instances of educational reports, both national and local, which are unsurpassed in merit, and may well be studied as models by our ablest experts. As an example of the latter, we may mention the very extraordinary "Report on the Schools of Paris," of 1878, by Director Greard, covering a period of ten years; and Buda-Pesth affords a very conspicuous example of perfection in arrangement and completeness in detail of school statistics.

In Germany, it is customary for each secondary school to issue an annual report, containing an elaborate statistical statement, the chronicle of the year, the course of study, a detailed account of the work done, and a learned essay. These documents are largely exchanged for the purpose of comparison.

But, notwithstanding our creditable achievement in this particular, in surveying the results of our systems of reports as a whole, we find very great imperfections, shortcomings, and desiderata. Over large areas we find inadequacy, not only in the character and amount of the information disseminated through this channel, but in the means of procuring it and in the method of collating, presenting, and interpreting the results. We find, also, a too general insufficiency of provision for diffusing among the mass of the people, by means of general and local reports, the information which they need for inspiration and guidance in the performance of their duties toward school interests, both as parents and citizens.

It is the object of this paper to point out the more important merits and defects in school reports, and to suggest desirable improvements, more specifically, of state and local school systems.

II. The report of the National Commissioner of Education claims our first attention as being a comprehensive summary of all the educational reports of the country, whether of systems or of institutions of instruction.

This document gathers up, condenses, and arranges for comparison the most essential facts relating to our public school systems, state and local, private schools of different grades, and state and corporate institutions of instruction, of all sorts and grades, from the university and professional schools, to the kindergarten and schools for feeble-minded youth ; and is then distributed to all points of our territory, where its treasures of wisdom and fact become available for the use of all officials charged with the duty of preparing educational reports.

The law being silent as to the character of this report, and making no provisions for the materials to be embodied in it, it seems almost incredible that the Commissioner should have been able to make it what it is by the aid of merely voluntary contributions of information afforded by educational officials.

The vast body of statistical information comprised in the series of this report has been furnished by answers to inquiries embraced in a number of carefully prepared schedules annually sent out by the Bureau.

Schedule Number I, the most general and comprehensive, comprises fifty-one inquiries, which it is deemed that well organized State Departments of Instruction should have the means of answering correctly. Number II, more specific in some points, is adapted to reveal the condition of city systems. Besides these, there are upwards of twenty schedules, relating to different kinds of institutions of instruction.

Considering that the answers to these inquiries are wholly voluntary, they are more complete and accurate than could have been expected, and every year shows a gain in the direction of completeness. Still there are too many regrettable failures to respond to the inquiries. But in view of the very encouraging progress made, it may reasonably be hoped that at no distant future a very near approximation to completeness of returns may be reached.

School statistics are most beneficially appreciable only by comparison, and comparison is practicable only so far as uniformity

exists. Notwithstanding the disadvantage under which the Commissioner has labored from lack of authority to demand regular and uniform returns from States, cities, and institutions, he has succeeded, almost from the first, in producing annual reports in pursuance of the requirements of law in respect to the dissemination of information, far more comprehensive and valuable than have been issued in other countries.

Twelve years ago, M. Buisson, in the former of his reports, already referred to, said: "The National Bureau of Education, at Washington, began, a few years ago, the organization of school statistics for the whole extent of the United States; and, if one seeks to-day to form an idea of the total result of instruction, there is no great country of Europe which affords so complete an exhibit of its educational institutions."

During the period which has elapsed since this was said, the reports of the Bureau, as already intimated, have been constantly improving in every respect, and the large number of copies annually printed and gratuitously circulated has made them accessible to all inquirers, thus keeping before all educational officials an admirable model of logically organized statistical facts, and the current transactions relating to educationl progress and development, both at home and abroad.

The tendency in educational administration of all sorts to conform more and more to the statistical organization adopted by the Bureau, is highly gratifying, and it is desirable that educational bodies should favor this tendency, and endeavor to procure the legislation requisite to render a complete conformity practicable.

Besides the annual reports, containing the most useful information that could be gleaned from foreign countries, together with the educational collections from our own country, already referred to, each giving abstracts of the various classes of instruction, such as primary, secondary, superior, professional, and special, with lists and statistics of all noticeable institutions, and a general summary of the whole educational field, the Bureau has issued several valuable special reports on important topics of current interest, a number of smaller publications on matters of minor importance, and occasional circulars of information, to the number of about sixty. In quantity, these publications, up to the year 1883, amounted to 15,577 closely-printed, large octavo pages.

III. The invaluable reports issued from the Bureau of Education, the institution characterized by the great French authority

just cited, as the "central establishment of comparative school statistics," could have had no existence but from the large precedent development of state and local systems of school reports, which had familiarized the public mind with the necessity and value of comparative school statistics.

In every State* of the Union, territories not being considered here, legal provision exists for the preparation of a report, either annual or biennial, of the condition of the public schools, either by the Board of Education or the chief educational officer, who is usually styled Superintendent of Public Instruction, though he is sometimes designated as Commissioner, or as Secretary of the Board of Education. As there is no State where a general report of the system of instruction is not required, so there is no State where there are not specific legal provisions for gathering up the information necessary for the statistical portion of the report, and no State, it is believed, where this class of information is not required to be supplemented in the report, by information other than statistical, including suggestions for remedying defects and promoting success. In some States, Alabama for example, it is enjoined upon the superintendent, by statute, to study other systems, at home and abroad, as a preparation for reporting the wisest plans for the improvement of the system.

For procuring the facts requisite for the statistical part of the report, specific, detailed provision is made in almost all cases. These provisions prescribe: (1) what classes of facts shall be obtained and reported; (2) what local and subordinate officials, both scholastic and non-scholastic, shall procure and make returns of the different classes of facts called for by the schedules of inquiries sent out by the superintendent; and (3) the penalties for non-performance of the duties thus prescribed.

In respect to all these points there is a wide diversity among the school codes of the States. Most of these codes contain excellent provision for some particulars of these requirements, while they are quite deficient in others.

1. Recurring to the first division, we find that while in some States numerous classes of facts are made obligatory for the report; in others, it is left mostly or entirely to the discretion of the superintendent to determine this matter. Of the latter class, New

*The committee regret to be obliged to except the State of Kentucky, from which, up to the present time, they have not been able to obtain a report or a copy of the school laws. This exception applies to one or two subsequent statements.

Jersey is, perhaps, the extreme example, while Illinois may be taken as a type of the former, the obligatory facts called for being set forth as follows:

"The whole number of schools which have been taught in each county in each of the (2) preceding years, commencing on the first of July; what part of said number have been taught by males exclusively; what part of said whole number have been taught by males and females at the same time, and what part by males and females at different periods; the number of scholars in attendance at said schools, the number of persons in each county under twenty-one years of age, and the number of such persons between the ages of twelve and twenty-one years that are unable to read and write; the amount of township and county funds; the amount of the interest of the state or common school fund, and of the interest of the township and the county fund annually paid out; the amount raised by an ad-valorem tax; the whole amount annually expended for schools; the number of school-houses, their kind and condition; the number of townships and parts of townships in each county; the number and description of books and apparatus purchased for the use of schools and school libraries under the provision of this act, the price paid for the same, and the total amount purchased, and what quantity and how distributed; and the number and condition of the libraries."

The starting-point of a good system of school statistics is a good plan of school census. For one of the elements of a good census, namely, an *annual* enumeration, provision is made in most of the state systems. In a few, however, it is quite too infrequent, taking place only at intervals of four and even five years, as in the case of Virginia. In a number of the systems, the information gathered by the census is insufficient. Until recently, the Massachusetts law required but a single fact to be obtained by the enumerators, namely, the number of persons between the limits of the school age; and it now requires, in addition, only the name and age of each person enumerated. It has been improved in one other particular, however, namely, by making the school boards of cities and towns responsible for taking the census, whereas previously it was the duty of the tax assessors, who were wholly independent of the school department. In a considerable percentage of the States, this service is still left to officials outside of the educational organization. California is, perhaps, the State which occupies the most advanced position in respect to provision for

obtaining the school census. This provision is, in substance, as follows: There are officers in each county for this particular duty, called census marshals. It is the duty of this officer to take the census, annually, of all children under seventeen years of age, by personal visitation and observation, and inquiry at each dwelling. He must take the number, age, sex, color, and nationality, of all the children listed, and the names of parents and guardians, and such other facts as the State Superintendent of Public Instruction may designate; and the report must be made under oath, on blanks furnished by the State Superintendent.

The census marshal has power to administer oaths to parents and guardians.

But, however the school codes may differ in regard to the prescribed items of statistics to be obtained, which may be regarded as constituting the permanent part of the statistical report, they approach to unanimity in properly giving the superintendent discretionary power to include other items in their schedules of inquiries.

There is still another diversity to be noted in respect to the materials for the statistical report. In a few States the report is limited exclusively to matters pertaining to the public school system. In a considerable number, statistics of private schools are included. In some, the report embraces, also, an account of such institutions subsidized by the State as are actually under the supervision of the board of education or the superintendent. In other States, the superintendent is required to include in his report, information concerning all educational institutions receiving aid from the State, including the state universities and colleges, where such institutions exist.

2. In every State, the superintendent or board of education is required to send to certain local officials, blank schedules of inquiries to obtain the statistical facts requisite for the state report; and it is made the duty of these officials to make returns of the information called for.

In a large proportion of the States, the county superintendent is the medium of communication between the state department and the local boards, officials, and teachers. This officer is made responsible for the collection, consolidation, and forwarding of the returns of his county.

In the more rudimentary systems, the teachers report the school statistics directly to the county superintendent; while in those

more completely organized, the teachers report certain classes of facts to the town or township trustees, who consolidate the facts thus obtained with information obtained from other sources, and report the same to the county superintendent. As a means of securing uniformity and accuracy in the returns, the proper school registers are furnished to the teachers by the State.

The Indiana system is a good representative of this type, and perhaps deserves the distinction of being cited as making the most logical, complete, and liberal provision for the state report of any system in the country.

In the New England States, where, unhappily, no office analogous to that of county superintendent exists, the city and town boards are made responsible for reporting directly to the state department the requisite statistical returns obtained from teachers and other sources.

3. And, finally, to secure honesty and punctuality in making the required returns, more or less stringent provision is every-where made. In the most advanced States, the officials of all the orders in the hierarchy concerned in making the returns, have to verify their reports by affidavit, and are subject to serious forfeitures and fines for neglecting to report at the time legally specified. In the case of teachers, a portion of the salary is withheld; in the case of town and county officers, fines are imposed on the delinquents, and school moneys withheld from the schools under their charge.

While legal provision, more or less complete, is made, as we have seen, in all state systems, for exhibiting the condition and progress of public instruction, the superintendent is left more largely to his own resources for the information requisite for that division of the report containing the statements touching the condition, progress, and wants of the system, which can not be presented in statistical form. One of the sources of this information is afforded, however, to some extent, in nearly every State, by local printed and written reports.

We are thus brought to the consideration of the provisions for the other class of school reports besides the general or state reports, namely, the local reports of different kinds, such as county, city, town, and township reports. Here we find scarcely anything approaching to uniformity, either in respect to statutory provision or local practice. In many States the county superintendents are required to make written reports to the State Superintendent. In Virginia, the county superintendents and

superintendents of cities must make reports to the State Superintendent, brief abstracts of which shall be furnished to every newspaper published in the county.

Statutory provision, requiring city, town, and township reports to be printed, is exceptional. In Massachusetts, however, the school committee of every city and town is required annually to print a detailed school report, in octavo form, for the use of the inhabitants thereof. And in the New England States, generally, the school committees of towns are required to make detailed annual reports to the town meeting, though the printing of the same generally depends upon the vote of the town.

IV. To attempt to estimate the results in the promotion of education, of the legal provisions thus briefly reviewed, would be to go beyond the scope of our inquiry, which is concerned with their results only as manifested in the reports produced, viewed in respect both to their quantity and character. As every State has come to have a public-school system, with a state department of supervision, so we find that a report has come to be issued by every state department of schools. The results of an examination of a set of these documents recently issued, in respect to form, size, number of copies issued, contents, etc., are herewith presented in tabular form :—

# TABLE OF FACTS RELATING TO STATE REPORTS.

| STATES. | Annual or Biennial. | For What Years. | No of Pages. | Accompanied by Written Reports of County Sup'ts. | Table of Contents or Index. | Bound. | Summary of Statistics. | By What Authority Printed. | No. of Copies Printed. | Whole Number of Pages Printed. | Separate Co. Rep'ts in Pamphlet | City and Town Reports Printed. | Township Reports Printed. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | an. | 1882 | 115 | no | neither | no | yes | act | 3,000 | 345,000 | no | few | no |
| Arkansas | bi. | 1881-82 | 187 | extracts | " | yes | no | statute | 5,000 | 935,000 | " | no | " |
| California | " | 1881-82 | 177 | " | " | no | yes | act | 4,500 | 796,500 | " | few | " |
| Colorado | " | 1881-82 | 159 | " | " | no | " | " | 3,000 | 477,000 | " | optional | " |
| Connecticut | an. | 1885 | 290 | Sch. Vis. Extr. | Con. & Ind. | " | yes | statute | 3,000 | 870,000 | " | generally | no T. P. |
| Delaware | " | 1885 | 71 | no | neither | yes | " | act | 1,500 | 106,500 | " | 1 | no |
| Florida | bi. | 1883-84 | 29 | " | " | no | no | " | 5,000 | 145,000 | " | no | " |
| Georgia | " | 1881-82 | 112 | " | " | " | " | " | 2,500 | 280,000 | " | 4 | " |
| Illinois | " | 1884-85 | 451 | special | Con. & Ind. | " | yes | " | 6,000 | 2,706,000 | 2 or 3 | some | 6 |
| Indiana | " | 1879-80 | 598 | yes | I. | yes | no | statute | 10,000 | 5,980,000 | few | few | no |
| Iowa | " | 1881 | 282 | extracts | C. | " | yes | act | 6,000 | 1,692,000 | no | cities | in papers |
| Kansas | " | 1881-82 | 151 | no | I. | " | no | " | 1,000 | 151,000 | " | few | no |
| Kentucky | | | | | | | | | | | | | |
| Louisiana | bi. | 1882-83 | 27 | no | neither | no | ..... | statute | ? | estim'd 27,000 | no | 1 | no |
| Maine | an. | 1884 | 138 | " | C. | yes | yes | " | 5,000 | 590,000 | " | yes | " |
| Maryland | " | 1884 | 336 | Co. Board | neither | " | " | act | 3,000 | 1,008,000 | 1 | 1 | " |
| Massachusetts | " | 1882 | 443 | no | Con. & Ind. | " | " | " | 4,500 | 1,973,500 | no | yes | " |
| Michigan | " | 1883 | 480 | " | Con. & Ind. | " | no | statute | 2 500 | 1,200,000 | " | few | " |
| Minnesota | bi. | 1881-82 | 239 | yes | neither | no | yes | act | 4,000 | 956,000 | " | cities | " |
| Mississippi | " | 1882-83 | 79 | special | " | " | no | ..... | ..... | estim'd 79,000 | ..... | ..... | ..... |
| Missouri | an. | 1881 | 212 | no | I | " | " | supt. | 4,000 | 848,000 | no | yes | no |
| Nebraska | bi. | 1883-84 | 135 | City Supts | I. | " | yes | act | 5,000 | 675,000 | " | few | " |
| Nevada | " | 1881-82 | 44 | no | neither | " | " | " | 1,000 | 44,000 | " | no | " |
| New Hampshire | an. | 1883 | 304 | Sch. Com. | I. | yes | " | ..... | ..... | estim'd 1,216,000 | " | generally | " |
| New Jersey | " | 1884 | 285 | yes | neither | no | " | act | 6,000 | 1,710,000 | " | cities | " |
| New York | " | 1883 | 405 | yes | I. | yes | " | " | 2,500 | 1,012,500 | " | yes | " |
| North Carolina | bi. | 1883-84 | 219 | no | I. | " | " | " | 1,000 | 219,000 | " | few | " |
| Ohio | an. | 1881 | 362 | " | I. | " | " | " | 22,600 | 8,181,200 | " | yes | " |
| Oregon | bi. | 1883 | 129 | " | neither | no | " | " | *1,000 | 129,000 | " | no | " |
| Pennsylvania | an. | 1884 | 479 | yes | C. | yes | no | " | ..... | 1,437,000 | ..... | ..... | ..... |
| Rhode Island | " | 1884 | 297 | Ext. Sch. Com. | Con. & Ind. | " | yes | " | 1,800 | 320,500 | no | yes | no |
| South Carolina | " | 1884 | 121 | extracts | neither | no | no | " | 300 | 36,300 | " | few | " |
| Tennessee | " | 1884 | 167 | digest | " | " | yes | ..... | ..... | estim'd 167,000 | ..... | ..... | ..... |
| Texas | bi. | 1883-84 | 77 | no | " | " | no | ..... | 1,100 | 84,700 | no | ..... | no |
| Vermont | " | 1881-82 | 126 | Town Supts. | " | yes | yes | act | 3,500 | 441,000 | " | yes | " |
| Virginia | an. | 1882 | 74 | no | C. | " | " | " | 3,500 | 259,000 | " | " | " |
| West Virginia | bi. | 1881-82 | 230 | yes | neither | no | " | statute | ? | estim'd 230,000 | " | few | " |
| Wisconsin | an. | 1881 | 452 | extracts | C. | " | " | ..... | ..... | estim'd 1,356,000 | ..... | ..... | ..... |
| Total | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3,691,700 | ..... | ..... | ..... |
| | | | | | | | | | | *First ed. 300 | | | |

It appears by this examination of the documents in hand that just one half are annual reports, while the other half are biennial. The pages are of the ordinary octavo size, with the exception of three, which are somewhat larger, namely, those of Pennsylvania, Ohio, and Michigan. In respect to the number of pages they contain, they range all the way from two-score to six hundred, and in the number of copies printed, from 300 to 22,600, the State of Ohio taking the lead in issuing this liberal number. It appears that, in general, the smaller the report in size the smaller is the number of copies issued. The average number of pages to a report is 229, and the aggregate number in the set at hand is 8,482. The grand aggregate in a single issue or set is upward of 38,000,000 pages. If we compare the whole number of pages printed with the number of inhabitants in the extreme States, Ohio and Oregon, we find that, in the former, the ratio is 2.5 to 1, and, in the latter, .73 to 1. Very nearly one half the set are in suitable binding, the rest being in paper covers.

As to the contents, we find, in the first place, about one half of these documents contain county superintendents' reports, in whole, or in part, or extracts from city and town reports. We find that about two thirds of the superintendents' reports begin with a more or less extended summary of statistics, and that all of them contain a body of statistics in detail. The following may be mentioned as samples of other matters accompanying or embodied in the reports proper of superintendents. The report of the president of the State University; an elaborate illustrated treatise on school architecture; a catalogue of the holders of state certificates of qualification for teaching; practical essays by county superintendents, prepared by request; addresses delivered before the State Teachers' Association; reports of the state normal schools, and institutions for the deaf, blind, and feeble-minded; reports of conductors of institutes; report of the State High School Board; report of the Board of Education, and reports of the agents of the Board; report of the Manual Training School; account of Teachers' Vacation Institutes.

Passing from state reports to local, we find that there are no separately issued county reports, there being, as we have already seen, no legal provision therefor.

Although cities are not generally required by law to print reports, as a matter of fact the cities which do not issue annual reports are very exceptional. These reports are uniformly of

octavo size of page, and in aggregate number of pages annually printed, far exceed the state reports. In character, these reports differ from the state documents, in dealing more especially with matters pertaining to school organization and methods of instruction and discipline, and also in details of statistical facts. Here the unit of comparison is the school, whereas, in the state report, it is the county, city, town, or township.

Published annual reports of towns and townships are practically limited to the New England States where they are very general. In Massachusetts, in accordance with the law already mentioned, the school committee of every one of the 346 cities and towns print, annually, a detailed report of the schools, for the use of the inhabitants thereof. Each year a set of these documents is bound up, making about twelve fair-sized octavo volumes, and placed in the library of the Board of Education.

M. Buisson, in considering our school reports, national, state, and local, characterizes them as an "inexhaustible source of information and judgments," and "a collection of authentic school documents without a parallel."

V. It remains now to add some criticisms and suggestions.

The most obvious thing to remark as the result of the examination of the set of state documents, and the facts presented, is that while these reports, as a whole, are highly creditable, not only in respect to the quantity and character of the matter which they contain, but in the number of copies printed and circulated; yet there is a number of them which, though in general satisfactory, and in some cases worthy of praise in point of quality, are wholly inadequate, in respect to quantity and variety of material, to serve the purpose intended, and the number of copies printed is far too limited to supply the need, on any reasonable theory of issuing reports.

It seems a surprising fact that just one half of these documents have been sent out, having neither an index nor a table of contents. To send out such a document as a state school report without an index or table of contents would appear to be an inexcusable omission. Five reports have a table of contents without an index, eight have an index without a table of contents, while five only have both a table of contents and an index. An index is hardly necessary to a small document, but to the larger ones it is indispensable for purposes of consultation.

Considering the number and rank of the authorities who have

sanctioned the custom, we are warranted in laying it down as a rule that the superintendent's report should contain a statistical summary, and the better taste places it in the foreground, instead of sandwiching it in the middle or appending it to the end. Those which do not contain such a summary, must be regarded as defective. The summary ought to contain a clearly and logically arranged statement of the final result of every class of tabulated information set out in comparison, as far as is practicable, with the results of the preceding or other previous year. The summary is usually a fair criterion of the character of the whole document. In some of these, singular omissions are noted; such as, the statement of the school age in connection with the number of children of school age, the population of the State, the distinction of sex with respect to pupils. We notice in one statistics of towns, both by counties and by State, and yet the number of towns in the respective counties and in the State is nowhere given. In the present set or series, perhaps the fullest and most complete summary is found in the Wisconsin document. It is, however, perhaps a little too extended to be accurately described as a summary, as it comprises, with some brief explanatory remarks, about twenty-five pages.

In the best reports, the statistical summary is followed by an interpretation and discussion, more or less extended, of its contents. Here the author finds himself in need of the most thorough knowledge of school economy, as well as a familiar acquaintance with the working of the system under consideration, as the superintendent is not merely an agent for the collection and diffusion of information, however important this office may be. The essential function of the State Superintendent is that of adviser. In the first place he is the authoritative adviser of the legislators on educational matters. In this capacity it is constantly encumbent on him to handle, in his report, topics which belong to what we may denominate *educational statesmanship*, that is, the questions of all sorts relating to educational legislation. Educational statesmanship requires especially two things—a knowledge of educational systems and a knowledge of jurisprudence.

Probably no superintendent has surpassed Horace Mann as an educational statesman, and although his style was too rhetorical and discussive for a model for imitation, and many of the topics he treated have become somewhat obsolete, in our day, it would be well if his twelve reports could be carefully read by every

superintendent before sitting down to write his first line of advice to legislators. But it is more especially important that the superintendent should be well informed on the current history of education at home and abroad. Hence the appropriateness of the Alabama provision already cited, respecting the studies and inquiries of the superintendent. But the superintendent is also the legitimate adviser through his reports, especially in States where local reports are few and far between, of teachers and school officials in respect to methods and management, and the details of school-keeping and local school administration. A considerable proportion of these reports are good examples of what reports should be in this comprehensive, two-fold sphere of advice and counsel, of opinion and judgment. But how striking the difference, in this respect, between the crude and provincial utterances of the inexperienced chief, and the sound and judicious pages of the later reports of a Wickersham?

Turning again to the statistical portion of these reports, we find them, in general, worthy of great praise, especially in view of their comprehensiveness. The majority of them comprise a wide range of classes of information, and are well digested and arranged. In taking up any one of the twenty best specimens, one would justly call it admirable; but in attempting to make a comparison between them, one would soon meet with difficulties, not only on account of deficiencies not at first discovered, but also on account of omissions in each, which ought to be supplied, or some superfluities which ought to be lopped off. It is not necessary that the statistics of all States should be identical in facts and form; but uniformity is desirable up to a certain point, including the elements which are especially useful for interstate comparison. These items should constitute the permanent part of the system. Beyond this point, other classes of facts should be added as the exigencies, from time to time, require. Such a uniformity is recommended and urged, not merely for the purpose of interstate comparison, but because, up to a certain point, which it is not necessary now to attempt to fix, there can be but one best scheme of statistical exhibit for any State, and, this being determined upon, it follows that every State ought to conform to it as far as is practicable. There is but one practical way of reaching this uniformity, and that is by making the permanent part of the statistics of States and cities conform to the statistical schedules numbers I and II, respectively, of the Bureau of Education. Con-

siderable progress in this direction has already been made. A united and vigorous effort on the part of superintendents would, no doubt, accomplish, at no distant future, the desired result. Were this theory adopted, there would be no further room for new schemes of statistics. The logical process of improvement would consist in modifying items in the Bureau schedules, as demanded by competent public opinion. One of these items the committee take the liberty to call attention to, namely, that of legal school age. In his last report, the Commissioner of Education states, on this point, that "there are sixteen different school ages in the states and territories, the longest extending from four years of age to twenty-one, covers a period of seventeen years, and the shortest, from eight years of age to fourteen, a period of six years only."

School age may serve one of three purposes: (1) To include the persons entitled to school privileges; (2) to include the children who ought to be constantly in attendance at school during school time; (3) to include the persons whose number is taken as the basis for the apportionment of school revenue. It is the attempt to make one age answer these three different purposes which has caused the existing diversity of both law and opinion as to its limits. It is evident that it makes very little difference what is adopted as the school age to serve as a basis for the equal distribution of school funds. The essential thing is, in this case, that the persons between the limits of age, fixed upon, be accurately enumerated. Again, it is evident that the school age, as indicating the right to school privileges, should not be the same as the school age as indicating the obligation to be in attendance at school. The former might be called the legal school age, the latter the obligatory school age. The enumeration of persons of legal school age, as thus defined, has no useful purpose; while the enumeration of persons of obligatory school age has. It is the opinion of the committee that the obligatory school age, as thus defined, should be the census age, should be taken as the basis for the apportionment of school revenues, and as the basis for school statistics. What should be the limits of this age? It is recommended that the limits be six and fourteen, as the best opinion and practice have adopted these limits of age for compulsory education. In the Bureau schedule the school age is from six to sixteen years. It is evident that this can not be adopted as the legal school age as above defined, nor as the obligatory age, the upper limit being too high for the latter, and too low for the former. If, therefore,

universally adopted, for the purpose of school census, it would serve the purpose only as the basis for the apportionment of school revenues. No State has, as yet, adopted the school age here recommended; but, on the other hand, only one State has adopted the age of the Bureau schedule. Two States have followed Massachusetts in adopting five and fifteen as the limits; but these limits were adopted in Massachusetts for no earthly purpose, except as a basis for the apportionment of the proceeds of the school fund, the right to school privileges having no relation whatever to this age. Nor does the compulsory school period, which is from eight to fourteen, conform to it at either extreme.

In the matter of school nomenclature, greater uniformity is desirable, to render both the statistics and the organization and management of different systems intelligible to outside inquirers. Who can unravel the mystery of the word "district," as used in all the different states? And who but a New Yorker can understand the meaning of that word, even in the State of New York? Or who can tell what the phrase "whole number of children," as used in different reports, means? Whether the whole number on the roll at a given date, the whole number of different children enrolled during the year, the whole number enrolled with duplicates, or the whole number of children enumerated? The "number belonging" and "membership" are no less indeterminate phrases.

In many state reports, the "whole number of schools" is given. This item seems to be not only useless, but misleading. It is certainly useless, both for home and interstate comparison, as the increase or diminution in the number of schools is not necessarily an indication of an increase or diminution in school accommodations. If this item be included, the kind of school should be indicated.

In respect to comparison of certain statistical matters, we find that, in one State at least, the law requires the superintendent, in his report, to arrange the statistical facts so as to show the comparison between the results of the current year and the preceding, or some previous year, when he may deem it desirable. Many reports contain the former comparison, that is, the results of the current year with the preceding, but very few show a comparison of the current year with a more remote year, say the fifth, tenth, or twentieth year previous. The comparison between the results of somewhat widely separated periods is often more instruc-

tive than the comparison between two consecutive years, which can hardly show the drift of things in any particular. A still more useful form of comparison for occasional presentation, is that, for a series of consecutive years, say ten, a good example of which is found in the statistical summary of the California report.

Mr. Mann invented two modes of comparing the towns of a state: (1) by ranking them according to the percentage of valuation raised by tax and appropriated to school purposes; and (2) by ranking the towns according to the amount raised by taxation per capita of the school population. This device has been perpetuated, and it has had no little effect in stimulating the towns to attain and hold a respectable rank in these lists, and especially to avoid falling to a place near the foot.

In city reports, especially, it is a practical question of considerable importance where to draw the line between the classes of facts appropriate for comparison and the classes inappropriate. Among the latter may be set down the following: a comparison of schools with respect to the percentages of scholarship in the different branches; the record of tardiness and misdemeanors; the rank of the graduating class, especially if girls. So are rolls of honor inadmissible, at least as far as girls are concerned.

## VI. SUMMARY OF RECOMMENDATIONS AND SUGGESTIONS FOR THE SPECIAL CONSIDERATION OF THE COUNCIL.

1. That all state reports be annual, without regard to the fact whether the legislature has annual or biennial sessions, as the report is not merely for the use of the legislature, but for educational officials, teachers, and such of the inhabitants as might be expected to profit by such a document.

2. That all county superintendents make annual written reports, which, upon the approval of the State Board of Education, or superintendent, shall be printed in the state report, or separately, for the use of the inhabitants of the counties respectively, or equivalent districts.

3. That all city boards or superintendents print annual reports, within reasonable limits, as to details and expense, for the use of the inhabitants of the respective cities.

4. That the school boards of towns or townships, where there are no county superintendents, print annual reports, as in above

section, for the use of the inhabitants of their respective towns or townships.

5. That all reports, general and local, be printed in pamphlet form of the ordinary octavo size.

6. That all state reports, and a portion, at least, of city reports, be issued in binding.

7. That all reports have a table of contents, and that those of the larger size have also an alphabetical index.

8. That all reports of school systems, state and local, begin with a statistical summary, and that a committee of the Council be charged with the duty of reporting on the best plans of statistical summaries for state and local systems respectively.

9. That a committee of the Council be charged with the duty of reporting on the subject of uniformity of nomenclature.

10. That the items requisite for obtaining the information necessary to meet the requirement of Schedule No. I of the Bureau of Education, constitute a permanent part of the blank inquiries annually sent out by state superintendents, and that the returns to the same constitute a permanent part of the state report.

11. That all accounts, records, and registers of city systems of schools be so kept as to afford the statistical information called for by Statistical Schedule No. II of the Bureau of Education, and that the same items be included in the annual reports of the city systems, as a permanent part of the statistics thereof.

12. That in all state systems of statistics, a distinction be made between rural and urban populations, the inhabitants of compact towns or villages containing a population of five thousand and upward being designated as urban, and all others as rural.

13. That the state reports contain the actual number of persons of each age in all the public schools of the State at an approximate date, say the middle of the school year, distinguishing between urban and rural schools; and that city reports contain the actual number of each age, at a given date: (1) irrespective of grades; (2) in the three different grades, high, grammar, and primary; (3) in each class and school of these three grades.

14. That useless and false averages be eliminated from statistics; for example, the average number of months the schools have kept, as reported in the Massachusetts report.

15. That in all the statistics relating to the personnel of systems and schools, the distinction of sex be maintained.

16. That the number of state reports to be printed and the mode

of distribution, be fixed by law in all the States, as it now is in some of them, and that such statute specially provide that a reasonable number, not less than twenty-five, be sent to the Bureau of Education, and that not less than four copies be sent to the Department of Education of every other State, and that a copy be sent to each of the normal schools, colleges, and public libraries, the newspapers within the State, and the educational press of the country at large, and that a liberal number be left for distribution at the discretion of the superintendent.

17. That the legal and census school age be from *four* to *twenty-one*,* and the obligatory school age from *six* to *fourteen*.

18. That a committee of the Council be charged with the duty of reporting on the utility and the ways and means of promoting an international comparison of school statistics.

JOHN D. PHILBRICK, *Chairman*,
WILLIAM E. SHELDON,
THOMAS B. STOCKWELL,
Committee.

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## REPORT OF DISCUSSION ON SCHOOL REPORTS.

[REPORTED BY E. J. JAMES.]

At the suggestion of the Chair, the general discussion of the report was indefinitely postponed, and the recommendations of the Committee were discussed in order.

The first recommendation, that State Reports be made annually, was passed, after a short discussion, participated in by Messrs. Hewett, Sheldon, Boyden, and Rounds.

Mr. HEWETT did not see why biennial reports were not satisfactory. They certainly are in Illinois.

Mr. SHELDON thought that there was great value in having the information contained in these reports as fresh as possible for purposes of comparison.

Mr. BOYDEN suggested that there was a legal difficulty in the way, owing to the fact that the legislature had to approve the printing of the report, and many legislatures met only every two years.

The remark was made that the Council should consider not so much what is possible under present laws, as what is desirable with a view to securing proper laws.

Mr. ROUNDS called attention to the fact that, in some States, the reports of the Department of Education are made annually, though the legislature meets biennially.

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* The original recommendation of the report fixed the census school age at six to fourteen, but, after considerable discussion in the Council, the committee withdrew this recommendation and, with the Council's approval, substituted the above (17). It is understood that the age, as well as the name, of each individual enumerated, is to be taken in the census, so that the number of each age, as well as the number between any two limits of age, may be ascertained.
J. D. P.

The second recommendation as to the Reports of County Superintendents was discussed by Mr. HOOSE, who wished to know why the publication of such reports should be made dependent upon the approval of the state authority, and by several other gentlemen, who agreed that if the State published the reports of local officers at its expense, its officers should be authorized to decide what is proper or improper for publication in such reports.

The recommendation, in regard to reports of city boards for the use of the inhabitants of the respective cities, was discussed as follows:

Mr. PHILBRICK declared that the last clause was necessary, in order to afford some indication as to number of copies to be issued.

Mr. GOVE said that the question of expense was a very serious one in this connection. He could not say exactly what per cent of the funds available for school purposes should be used for the preparation and printing of reports. He thought that $500 would be too much, if the the whole school appropriation were only $50,000. Too much money is expended in this work, at least in the western cities. Reports should not be printed for the whole world, but chiefly for the people of the locality.

Mr. PHILBRICK granted the danger of too great an expense for this purpose. The tendency to run either to one extreme or the other was illustrated by the history of Boston. Enough copies should be printed to excite general interest in the subject of the report.

Mr. SHELDON thought the expense should be reasonable, and that copies should be printed for distribution outside of the city. There should be reciprocity in this matter. Denver should exchange with Boston, and *vice versa*.

Mr. STOCKWELL suggested that the expense of printing was greatly increased by the multiplication of tables, in which few people are interested. These might be omitted in the reports for popular distribution and much expense thus saved.

Mr. THOMPSON thought that two sets of reports should be published; the one for the general public containing matter of general interest, the other containing special information for those specially interested in education.

President WHITE asked whether much time was not already spent in collecting statistics, which might be better employed in teaching.

Mr. HANCOCK agreed that this was so, and that a great saving might be effected if the reports of local and state officers conformed to the scheme proposed by the National Bureau, so as to save duplication of reports.

Mr. PHILBRICK thought that, taking the whole field into consideration, it was not true that too much, but, rather, that too little time was spent in this work. The trouble is, that so much of the time actually spent, is spent on things of no importance. The Committee would modify the report so as to read that reasonable expense should be incurred.

In discussing the recommendation that township and town authorities make reports, it was remarked that such reports would often be strange documents. A rejoinder was made by Mr. Stockwell, that the reports of the local boards in Rhode Island are most valuable contributions to the local educational work.

Mr. PHILBRICK said that the cost was insignificant compared with the great value of such reports; referred to the Massachusetts local roports, which cost only about $11,000, and were of untold value.

Mr. SHELDON agreed with Mr. Philbrick in every statement.

The recommendation in regard to binding all State Reports was objected to by President White, on the ground that it would involve such a heavy expense as to lead to a small edition. A part of the edition might be bound, and the rest be issued in pamphlet form.

Mr. HEWETT saw no reason for this provision.

Mr. PAYNE thought that a small bound edition is worth more than a large pamphlet one.

The recommendation that the schedule of the National Bureau should be adopted as the basis of State Reports, called forth the remark by Mr. Smart, that such a provision would necessitate some serious changes in school laws. He also asked whether the Committee wished the Council to approve the existing schedule as an ideal one, or simply that it should approve of the state authorities' following the schedule actually adopted by the Bureau.

Mr. PHILBRICK replied that the Committee desired the latter.

The recommendation calling for a distinction in the reports between city and country schools, gave rise to a discussion of the meaning of town, township, city, etc., and a modification of the report so as to include in urban reports the reports of compact communities of more than five thousand inhabitants.

The recommendation that a careful report of children actually in school, at a given date in all the different departments, called forth the question, why such a provision was inserted.

Mr. PHILBRICK replied that a satisfactory comparison of different schools, different cities and States, was only possible on the basis of such information.

The recommendation that six to fourteen years be the limits of the census school age provoked much discussion.

Mr. HANCOCK thought that such a rule would tend to confine school attendance to those years, while our American system seemed to be rather to encourage attendance until the close of the high school.

In reference to the statement, the chairman of the Committee said that six to fourteen is the census school age by the consensus of the world's opinion, and that it was also the obligatory school age.

President WHITE inquired whether an examination of the genesis of that opinion would not show that it was the result of European conditions, and hence might not be applicable to the United States.

Mr. PHILBRICK thought that no sound educational theory can be built up on any other ground than the common consent of educators the world over. No one thinks it really desirable that all children should go through the high school in our present economic conditions. The great majority must limit themselves to the years from six to fourteen.

Mr. HANCOCK thought that we should keep advancing the standard of public opinion until all would be willing to go through the high school. Compulsory education, when it comes, should not be based on attendance, but acquirement.

Mr. PHILBRICK wished the discussion to come back to the point, viz., the census school age. This has nothing to do with the question as to how long children *may* go to school. We wish uniformity in school reports, and the question is, which is, on the whole, the most suitable age to adopt as the basis.

Mr. HOOSE thought that the sentiment in New York against high schools is strengthened by the fact that the law fixes the school age at six to fourteen. The upper limit should be fixed at eighteen.

President WHITE thought that the upper limit should not be fixed lower than at sixteen.

Mr. SMART was willing to take twenty-one, and agreed with Mr. HOOSE that the enemies of the high school would derive aid and comfort from the adoption of any such system.

Mr. JONES said that since the law was changed in Pennsylvania, making twenty-

one instead of fourteen the upper limit, the tendency in Erie to go to the high school had materially increased, and he believed it to be owing, in some degree, to this change.

Mr. BARRINGER agreed to the sentiment already expressed, that such a law would injure high schools.

Mr. BROWN was of the same opinion.

Mr. STOCKWELL did not think that a law fixing the school age had anything to do with attendance at the high schools. It was certainly not so in Massachusetts.

President WHITE said that we can not generalize on Massachusetts.

Mr. MOWRY thought that twelve years (six to eighteen) was a better school period than eight years (six to fourteen).

Mr. EATON was of the opinion that the whole discussion had been along a side line, and that, if the question were properly understood, there would be substantial agreement.

During the discussion it was said by Mr. PHILBRICK, that forty years ago, in Boston, the primary and grammar school ages were determined by law, and only pupils within the prescribed ages were admitted to the respective grades. It had worked well there at that time.

Mr. LYON had never heard of such a thing.

It was also remarked that the law in Massachusetts fixed the upper limit of the school age at fifteen, and thus allowed the pupils to get started in the high school, after which they went on, so that the evil effects of fixing the age so low did not appear.

# VI. REPORT OF COMMITTEE ON EDUCATIONAL STATISTICS.

## SOME REFORMS NEEDED.

Statistics embody certain important facts in the departments of knowledge. Their value depends (1) on the proper classification adopted, (2) on the uniformity of such classification in its general application, (3) on the honesty and thoroughness of the collection of the data, and (4) on the careful collation of the facts under their proper classes. Their uses are (1) by comparison to measure certain conditions and movements in society, and (2) by deductions to determine the value and significance of the factors employed. The importance of educational statistics, as related to the quantity or the quality of educational work, is apparent from the following considerations:

*First*—Correct statistics are the evidence of the progress or decline of educational affairs.

*Second*—Educational agencies lie at the basis of many of the great movements of the age, and men are accustomed to refer the solution of many moral, social, political, and religious questions to the prior developments and progress of education.

*Third*—Such statistics serve an important purpose in resisting the attacks made upon our school systems by their enemies, and they answer the unfriendly criticisms of their friends.

*Fourth*—Statistics are also important as the basis of wise and just legislation in the State or the Nation.

*Fifth*—Reliable statistics incite school officers to a more vigorous administration of school affairs, and tend to awaken a deeper interest in educational affairs among the people.

## SCHOOL POPULATION.

Educational statistics should first note the child population of the country under twenty-one years of age. By the last decennial census of the United States, we have the total population, by years, from one year old upwards, from which we can readily ascertain the school population as fixed by the laws of the several States. By this enumeration, we are enabled to estimate the amount, and, in some respects, the quality of the material to which our educational processes are applicable. As supplementary to the

national census, it is a matter of great importance that each State, or the subdivisions thereof, should take an annual census for educational and other purposes, in order that the status of population, and of education as related to population, may be determined more frequently. This population registration should include additional data as to sex, color, nativity, occupation, and literacy or illiteracy of parents, etc.

From this enumeration, we obtain the following important statistics:

1. Number of persons, by years, under twenty-one years of age, the maximum age of the school population of any State.
2. Child population to each 1000 people.
3. Children, male and female, of American parentage.
4. " " " foreign "
5. " " " white "
6. " " " colored "
7. Average population to square mile.
8. Average school population to square mile.
9. Population of cities of ——— inhabitants.
10. Child population in each.

## DEPARTMENTS OF EDUCATIONAL WORK.

For the education of the children and youth enumerated, public and private schools are established. These schools are known under the various titles of the kindergarten and other infant schools, primary schools, intermediate, grammar, high schools, academies, seminaries, colleges, universities, industrial schools, professional schools, art schools, etc. It is important, however, in the various nomenclature of schools in various parts of the country, that for general purposes, a common language should be used, and uniform terms employed with reference to the same grades of instruction, so that, within reasonable limits, the language and statistics of a school report may be intelligible in all parts of the conntry. For the purpose of establishing common terms of universal acceptance, it is believed that the following will meet and satisfy the required conditions:

I. Elementary education.
II. Secondary education.
III. Higher or superior education.
IV. Professional and special education.

By this nomenclature, elementary education is understood to apply to the instruction and training furnished by what are now known in various localities as primary, intermediate, grammar, and district (or ungraded) schools.

Secondary education is applied to training in schools usually known as high schools, academies, seminaries, etc.

Higher or superior education is applied to such training as is obtained in colleges, universities, etc.

Professional education is applied to the training which is furnished by normal schools, polytechnic and industrial schools, art schools, etc., for the various learned and other professions.

By the use of these simple and easily understood terms, which may be adopted in educational language at home and abroad, we have a classification by which we may compare the work of towns, cities, counties, states, and nations.

## GRADES OF ADVANCEMENT IN STUDIES.

Tables relating to advancement in studies are not likely to be compiled so as to give any reliable information, unless some common standards are adopted. To say that there are so many pupils in the first grade, in the first class, or in the primary school, or intermediate school, does not signify much unless it is specified what year's work or what portion of what year's work is meant by these designations. In Cincinnati, an intermediate school means one between the district school and high school, but in most places it means a school between the primary and grammar schools. It is impossible now to tell what part of the course of study is completed in a primary, grammar, or intermediate school, because usage varies. The only way to meet the difficulty is by recording and reporting the year's work as the unit of advancement. The course of study should be divided into such portions as can be accomplished in an average year's work, and this assignment of work should be revised from year to year, upon actual inspection of the amount actually accomplished by the pupils, an inspection made with consultation of the principals and assistants.

The report will then show how many pupils are doing the first year's work, which may be called the first grade; how many are in the second year or grade; how many are in the third year or grade, etc., without distinguishing primary or intermediate, or grammar school in this table, or mentioning classes, the grade or

year's work being the only essential thing, and the only thing not ambiguous. Even the word "grade" must not be used, unless it is the name given to the average work of a year.

Then the tables showing what grades of work the pupils are in, are of almost equal value. The work to be accomplished should be divided up so that the schedule shows how much the average pupil can do in a year. Then there is a standard, by which the amount of schooling, obtained by the average pupil in school, can be gauged.

The committee recommend that *elementary education* be included within the first eight years or grades of the school-work, excluding the work of the kindergarten and other infant instruction.

That *secondary education* include the next four years or grades of school-work above the elementary.

That *higher education* include the four years or grades of educational work above the secondary.

And that *professional and special education* three years, more or less, as is the practice of the professional schools, above or co-ordinate with the higher education.

In order to know the actual condition of the school-work, we need statistics showing the number enrolled in every school at each age, as follows:

| No. CHILDREN LAST CENSUS. | | | | No. AT SCHOOL. | | | |
|---|---|---|---|---|---|---|---|
| | M. | F. | TOTAL. | | M. | F. | TOTAL. |
| Under 4 years ..... | | | | ..... | | | |
| 4 to 5 " ..... | | | | ..... | | | |
| 5 to 6 " ..... | | | | ..... | | | |
| 6 to 7 " ..... | | | | ..... | | | |
| 7 to 8 " ..... | | | | ..... | | | |
| 8 to 9 " ..... | | | | ..... | | | |
| 9 to 10 " ..... | | | | ..... | | | |
| 10 to 11 " ..... | | | | ..... | | | |
| 11 to 12 " ..... | | | | ..... | | | |
| 12 to 13 " ..... | | | | ..... | | | |
| 13 to 14 " ..... | | | | ..... | | | |
| 14 to 15 " ..... | | | | ..... | | | |
| 15 to 16 " ..... | | | | ..... | | | |
| 16 to 17 " ..... | | | | ..... | | | |
| 17 to 18 " ..... | | | | ..... | | | |
| 18 to 19 " ..... | | | | ..... | | | |
| 19 to 20 " ..... | | | | ..... | | | |
| 20 to 21 " ..... | | | | ..... | | | |

In these tables, as in all others, it is of primary importance to exclude duplicate registrations. Pupils transferred from one school to another within the year, on account of removal of parents or because of promotion, will appear twice on tables of entire number enrolled, unless a plan is devised to prevent it. In order to prevent this, there should be a rule to the following effect:

No one having been a pupil in one school, shall be admitted into another within the scholastic year, without presenting to the principal a certificate of discharge from the former school, containing the items of attendance, number days belonging, number days attended, number days absent, times tardy, while in that school, since the beginning of the present scholastic year.

All items relating to ages, occupations or nationality of parents, and birthplaces of pupils, should be reported also on the same transfer certificate, and entered by the principal, who receives the transferred pupil, on the annual register of the school. On the other hand, the items above named should be at once erased by a line of colored ink from the annual register, upon the transfer of any pupil. Only this regulation will effectually prevent error from duplicate registration.

Duplicate registration, if not taken account of, completely vitiates the value of school statistics. In case of promotion from the primary to the grammar school, for instance, a class of 50 to 100 will be reported in the primary school and again in the grammar school, unless some effective rule has been adopted to prevent it.

The "average number belonging" to the school is important. The following rule is recommended to the superintendents of the country:

The pupil is counted as belonging for three days, in case of sickness or of absence for any cause, with or without intention of returning, and after three days the pupil's name is dropped from the register.

In addition to the items of total enrollment in the school for the year, and the "average number belonging," there should be the actual attendance in days. This shows the average amount of schooling per annum obtained by those who are really making a business of going to school.

Dr. Harris reports that in St. Louis, year after year, the average pupil attended school only 134 days in the year, instead of 200, the entire school term. Of these 200 days, he actually attended, deducting his temporary absences, 134 days.

Again, taking the statistics of years of 134 days in St. Louis, we find that the average amount of time at school there is six and two thirds years for the average pupil. On the other hand, looking at the amount of work achieved, measuring as near as possible by year's works, or grades of average pupil's work, of 200 days each, and we have four and one fourth grades as the average amount of work achieved. As the grade's work is estimated at 200 days, and the average school year only two thirds of a year, or 134 days, it will be seen that the four and three fourths grades corresponds to the six and two thirds years of 134 days, very nearly.

SUGGESTIVE FACTS.—Sexes educated, separately or together, and in what grades; color; nationality, native or foreign born; average number to a school in each grade, city and country; male, female, total; average attendance in each grade, city and country, male, female, total.

### TEACHERS.

Concerning teachers, a few important items are noted:

1. Teachers of Kindergarten schools, male, female, total.
2. " Elementary " " " "
3. " Secondary " " " "
4. " Higher " " " "
5. " Professional " " " "
6. Average number of pupils to each teacher in each grade.

SUGGESTIVE FACTS.—Age; normal, or other, preparation; years of service; grades of promotion; present rank; salary per month.

### BUILDINGS AND APPLIANCES.

Under this division are included school-buildings for schools of all grades; furnishings, arrangements for lighting, heating, and ventilation; grounds, apparatus, libraries, etc.

1. Buildings and grounds for primary and kindergarten schools: (*a*) Number, 000; (*b*) number school-rooms, 000; number sittings, 000; (*c*) value of buildings and grounds, $0,000; (*d*) value of apparatus and libraries, $0,000.

2. Buildings and grounds for elementary schools: (*a*) Number, 000; (*b*) number school-rooms, 000; number sittings, 000; (*c*) value of buildings and grounds, $0,000; (*d*) value of apparatus and libraries, $0,000.

3. Buildings and grounds, Secondary schools: (*a*) Number, 000; (*b*) number school-rooms, 000; number sittings, 000; (*c*) value of buildings and grounds, $0,000; (*d*) value of apparatus and libraries, $0,000.

## FINANCES.

### I. FIXED CAPITAL.

1. Estimated cash value of all taxable property.
2. Invested school funds.
3. Value of school grounds and buildings.
4. Other school property.

### II. RECEIPTS FOR SCHOOL PURPOSES.

1. From interest of invested funds.
2. From gifts, donations.
3. From state appropriations.
4. From tax on assessed valuation.
   (*a*) Rate,—mills per dollar.
5. All other sources.
6. Total receipts.

### III. EXPENDITURES.

1. School buildings (new).
2. School buildings, repairs, including additions and important repairs.
3. School books, stationery.
4. Salaries—(*a*) Kindergarten teachers.
   (*b*) Elementary teachers.
   (*c*) Secondary teachers.
   (*d*) High-school teachers.
   (*e*) Supervision.
5. Fuel.
6. Incidental expenses.

N. B.—By "incidental expenses" is meant all school expenses except those for tuition, for new buildings and furniture for the same, for permanent improvements of school property, and for sites for buildings.

## LITERACY AND ILLITERACY.

The statistics showing the actual condition of the community under the reading and writing tests, as obtained by the United

States census, though extremely vague, are probably the best obtainable. At least, none of our statisticians, native or foreign, have been able to apply more accurate standards of intellectual measurement than those, the results of which now appear in the national records. So indefinite and unsatisfactory are the tabulated statements as to state and national literacy, that the picture, as portrayed by writers and speakers on social and educational questions, takes on lighter or darker hues, according to the purpose of the artist. We may express the hope that the causes of illiteracy now existing may be made to apppear, and that an evident decennial increase in certain quarters may not be credited to the inefficiency of the public-school system, but rather to the inadequacy of the means for the complete illustration of its value.

THOMAS W. BICKNELL,
*Chairman.*

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## DISCUSSION OF MR. BICKNELL'S REPORT.

[REPORTED BY H. S. JONES.]

*Census.*

President WHITE—Does the committee recommend that the proposed census be taken yearly?

Mr. BICKNELL—Every five years, but an annual census would be better.

Mr. HANCOCK—Statistics should be obtained from private and parochial schools.

Mr. BICKNELL—But few States pay any attention to private schools.

Mr. STOCKWELL—If a census is to be of any value, it should be yearly, not complex, and should show, in general, the status of private and parochial schools.

Mr. SHELDON—Why take from one to twenty-one inclusive, as the census age?

Mr. BICKNELL—It is well to know the number of prospective pupils. The committee found a great variety of school ages, and so thought best to take the years reported.

President WHITE—The Chair does not see the importance of taking so complete a census every year. It may be well to take such a census every fifth year. Would not an annual census of the children and youth of school age be sufficient? Is it not well to make a distinction between a census for general purposes and one for school purposes?

Mr. BICKNELL—The committee did not intend to fix the "school age." We adopted the plan of the United States Census.

Mr. MOWRY—The question now under discussion differs from the one laid over this morning. That relates to the "school age;" this does not.

Mr. THOMPSON—Is it intended that but one census be taken every five years?

Mr. BICKNELL—The State may take it yearly.

Mr. THOMPSON—The census should not be elaborate. Experience has satisfied me that the data called for should be few and simple.

Mr. COY—It may be desirable to use the material gained by a decennial census soon after it is taken; if it be a mass of details, it will be of no practical account.

President WHITE—I would suggest that the committee determine the years to be included in an annual school census.

Mr. BICKNELL—The census recommended is for general purposes.

The President invited Dr. H. R. WAITE, of Boston, who had charge of the educational department of the United States Census, to give his opinion on the question.

Dr. WAITE—When we have a complete census, giving the ages of children from one to twenty-one inclusive, not in bulk, we can, by deduction, find out all important facts concerning school-going children. The usual school census is of little account in gaining educational or social statistics.

Mr. JAMES—This is a highly important question. We ought to recommend just what the committee has offered.

Mr. THOMPSON—The chief objection is that it can not be done.

Mr. TAPPAN—A school census is one thing; a general census is another thing. The census outlined by the committee seems to me a sort of half-and-half affair.

Mr. EATON—We are now increasingly considering what should be done for children under six years of age. The kindergarten is coming to the front in many of our cities. Shall the educator limit his view to the ordinary school population in his State? Who will take an interest in the younger children, if the teacher does not? We ought, at least, to know the number of children below the school age.

Mr. TAPPAN—This is all true; but when we go beyond the taking of a school census, we should make a census of the entire population, as well as other vital statistics.

President WHITE—I see that if we had an annual census of all children from one to twenty-one years of age, year by year, we could easily determine the number between any two included ages. I also see that such a census might protect the schools from the blunders now made by those who use the annual census of youth of school age, and the number annually enrolled in the schools, to determine the number of youth growing up unschooled. I withdraw my objection to the committee's recommendation.

Dr. WAITE—We are citizens of a Nation; hence, all our gathering of statistics should be national in spirit.

Mr. NORTHROP—The Census Bill, in Connecticut, was bitterly opposed on the ground that, as a law, it could not be executed; but the fact is that is was enforced successfully.

Mr. BOYDEN—The term "school age" has, in Massachusetts, four meanings, to-wit: (1) Children that may legally attend school; (2) those from 5 to 15, upon which is based the distribution of the school fund; (3) those who are obliged to attend school (8 to 14); (4) the age that children actually go to school. The plan of the committee covers all cases.

Mr. EATON—The heads of institutions for classes of unfortunate children, tell me they have great difficulty in looking up those who need the care of their institutions. The plan of the committee would be of great assistance in such cases.

On vote, the report of the committee was amended as to provide for an annual census.

*Grades of Advancement in Studies.*

Mr. MOWRY—The committee has used the term "elementary" schools. Would it not be better to subdivide, say 3 to 6 for kindergarten, 6 to 10 for primary?

Mr. HEWETT—The report puts this in admirable shape.

Mr. PHILBRICK—Why call the first year the first grade?

Mr. BICKNELL—This is done so that there shall be a correspondence of terms.

President WHITE—The Chair would suggest that the plan of the committee would be defective in country schools. In my former experience as State Commissioner of Ohio, I found that a duplication of enrollment was very common in the reports from the counties.

The Council instructed the committee to make such modification in its report as will provide against the counting of pupils more than once in determining the number annually enrolled in the schools.

*Average Number Belonging.*

Mr. HANCOCK—I would strike out the part relating to "number belonging." It is a source of confusion.

Mr. HARRIS—In seconding Mr. Hancock's suggestion, I would say the method has its local use, and it seems best to leave it to local care.

Mr. BICKNELL—I hope the item will be retained.

Mr. TAPPAN—To say a boy is in school, when he left three days before, is not according to fact.

Mr. HARRIS—Statistics under this head have a moral value. They show the power of the teacher in gaining and holding good attendance.

On vote, the term was allowed to stand in the report.

The recommendations relating to school attendance in days, teachers, and buildings were passed without discussion.

*Finance.*

Messrs. Northrop and Smart objected to the charging up to incidental expenses, annually, the interest on the sum invested in grounds, buildings, and other permanent improvements, and, on motion, this item was stricken out.

On motion, the report, as amended, was approved by the Council.

# VII. METHOD OF PEDAGOGICAL INQUIRY.

[A SPECIAL REPORT.]

*To Dr. E. E. White, President of the National Council of Education:*

The undersigned, appointed by you a committee to report on the Method of Pedagogical Inquiry, begs leave to offer this, his report, for your approval and the acceptance of the Council.

## *I. The Scope of Pedagogical Inquiry.*

1. It is a serious error to confine the definition of education in such a way as to make it include the province of the school only, and not the various educative influences of the four cardinal institutions of civilization — family, civil society, state, and church. But education, taken in this broad sense of the word, is not to be confounded with "pedagogy," which includes school education, and sometimes family education. Education in general is the main object of social science, which studies human welfare in society and strives to ascertain how to secure the normal development of man as a social being. Although pedagogy, or school education, concerns itself with only a segment of education, it must interest itself in the wider problems of social science, and comprehend their conditions, if it would wisely limit its practical endeavor to what falls legitimately within the function of the school. Without constant reference to the survey of education as a whole, it will not only mistake the objects of school education, but it will develop false and injurious tendencies within its own province.

2. The ideal of civilization determines the nature and character of all the educational means or appliances in the several provinces of education, and especially in the school. Those who have in charge the direction of schools, or who seek to influence such direction, should therefore study deeply the ideals of civilization and their realization in the several nations of the earth, past and present. Only a comparative history of civilization will enable one to understand the history of his own nation and its special tendencies; only such comparative studies will throw light on the relative proportions of the entire function of education which particular civilizations have assigned respectively to the cardinal

institutions — family, civil society, state, and church; only such study will explain the origin of the school, or define its proper functions.

3. The school is not one of the cardinal institutions of civilization, but is a supplementary special institution, designed to re-enforce one or more of the cardinal institutions in their educative functions. Thus in China it has supplemented the functions of a patriarchal state by preparing officials for the civil service. In Persia it fitted youth for military service; in it India perpetuated the rule of the Brahmin caste or the Hindoo church; in Judea it supplemented the family and the theocratic rule; in Athens, during the time of the Sophists, it educated youth for politics, or for influence in a democratic state; while in Sparta it educated for military and civil functions necessary to a rigid aristocracy whose constitution required the enslavement of a conquered race. The pedagogy common to all Greek states trained the bodily form through the pentathlon into gracefulness and strength, so as to express the highest idea of the Greek religion, namely, the belief that the gods were beautiful human forms, and that man could become divine through beauty. In Phœnicia the school education fitted youth for manufactures and commerce, teaching him writing and arithmetic, and morally disciplining him to despise home and love daring adventures in distant voyages.

In more modern states we find school education accented by the predominant institutions. In early Protestantism the reading of the Bible and religious psalmody was most essential, because the chief idea of the Reformation was the substitution of private judgment, enlightened by reading of divine revelation, in the place of the authority of a hierarchy. Jesuit instruction, on the other hand, established to counteract the influence of Protestant schools, laid the greatest stress on supervision and espionage, on casuistry and the art of defending the dogma against all attacks, and on unquestioning obedience to authority. The more recent forms of school education are more comprehensive, and emphasize far more the preparation for civil society, or for what is useful to the individual career of the citizen, as well as what fits him for the development of his common human nature.

These illustrations will serve to show the manner in which the school re-enforces the educative influences of the cardinal institutions according to their necessity at the special historical epoch.

4. In the next place, school education within its own province

subdivides into distinct interests or phases, which form the primary objects of pedagogical inquiry or investigation. These special subjects are—

(*a*) The course of study.

(*b*) The method of instruction.

(*c*) The mode of discipline.

(*d*) Plan of organization—the management which looks to (1) the location of schools; (2) style of building; (3) regulations of admission relating to ages, sex, and other qualifications; (4) length of school sessions, annual and daily; (5) mode of providing for the support and government of the schools by school-boards, supervising officers, teachers, etc.

Here are four great provinces of pedagogical inquiry, each capable of endless subdivision and specialization, and requiring such division of labor and such concentration and observation upon details as may absorb the attention of a whole generation of teachers and educational specialists. And yet this entire field of primary inquiry and investigation is conditioned upon the remoter field of inquiry already described—the inquiry into the educative functions of the cardinal institutions of civilization, and the province assigned to the school.

It must be determined what education appertaining to the family, to civil society, to the state, or to the church, shall be assigned to the school, or else the course of study can not be made out; nor can the methods of teaching, the modes of discipline, or the details of organization be fixed upon.

Inasmuch as the requisite concentration for scientific results demands the choice of a narrow field for investigation, while on the other hand the dependence of the problems in one field of inquiry upon the results obtained in other fields of inquiry, necessitate a general survey of the entire province of pedagogy, and also of the entire scope of education in general, it follows that we encounter here a very serious problem of method in pedagogical inquiry. How shall the necessary specialization of inquiry be adjusted to the equally necessary general survey of the whole?

This problem forms the second topic for examination in this report—

*II. The Relation of Specialized Inquiry to the General Survey of the Whole.*

5. It becomes of the highest importance here to determine the relation of specialized inquiry to its organization into a system.

The specialist sometimes supposes that his industry is all that is required for the creation of science in its completeness. He condemns what is called the philosophy of his subject as though it were premature generalization and unwarranted systematizing. On the other hand, the philosopher is apt to be impatient at the plodding toil and narrow gains of the specialist. But the fact that it needs both of these species of investigation becomes evident when we look to the practical field of human activity.

6. The will executes while the intellect surveys or analyzes. In the performance of a deed, the will should act in view of all the circumstances, but this view of all the circumstances is an intellectual survey. Hence human action demands a general survey of the circumstances before it, in order to act rationally. Suppose you omit the philosophical activity of the intellect—leave out the generalization consequent on a survey of the whole—and try to act with the aid of the specializing intellect alone. Then the will resolves and executes in view of a fragmentary circumstance, and does not weigh one particular motive with another. The act will be a "lame and impotent conclusion," because it lacks considerateness, and looks neither before nor after, but acts from one motive, and a trivial one; because it is an intentionally special view, and not a general survey at all.

The necessity of practical activity in any province, therefore, demands the intellectual activity of forming a general survey, as well as an intellectual activity of analyzing and specializing. Let us see how these co-ordinate:

7. Rational will-power is the will under the guidance of directive intelligence. This intelligence surveys various objects of action, and selects one of them as desirable; it surveys, likewise, various modes of action, and adopts the best as the most desirable.

Now, it is clear enough that analytical investigation may divide and subdivide objects and means forever; if the will waits for the completion of analytical investigation, it waits forever. The analytical intelligence can never arrive at a conclusion. Its analysis only serves to open up new vistas of further investigation. But, at any point of analytical investigation, it is possible for the intellect to stop its procedure and unify its results by comparison, to sum up all in a general conclusion, saying: "In view of all that is thus far discovered, this conclusion will follow." The trend is discoverable when two facts are ascertained; three facts confirm or modify the previously discovered trend. The practical

activity, whenever called upon to perform a deed, demands a cessation of analytical investigation and the interposition of a general survey in order to discover the trend that is revealed by the facts discovered. With this view of the whole, it acts as rationally as is possible to act.

Admitting that the increase of light, by the further discovery of new facts by the aid of the analytical intellect, is a never-ending process, we shall admit also that the will may act more and more rationally, according to the quantity of analytical, specializing work of the intellect that has been performed. But there can be no direct step from the specializing activity to the will activity of man. There must always supervene a summing up of those special results in a general survey before they become of any practical use. The jury must not permit themselves to decide until the case is closed. The case may be closed when only a part of the facts are in, because only a part of the facts can be ascertained. In the case of science, the facts can never be all ascertained, because each fact is divisible into constituent facts, each process into constituent processes forever. This is evident enough from the infinite divisibility of time and space. Therefore, we may insist upon this, that specializing science must admit the necessary intervention of the philosophic activity which takes general views or surveys before its results can become useful in human activity—before any knowledge discovered by pedagogical inquiry may be useful in the arts of teaching or school management.

8. But this is not all. If we examine what constitutes a science, we shall be equally compelled to acknowledge that mere specializing analytical activity can never produce a science. Science is systematic knowledge. Each fact is so united to other facts within a science, that each fact sheds light upon all facts; and every fact upon each fact. From the special facts discovered by the analytical activity of the intellect, not only no practical use would ensue, but no theoretic use except through their synthesis by general surveys. A science ensues, therefore, only after the particular facts obtained by analytic specialization are summed up. The case must be closed, and, for the moment, the assumption made that all the facts are in, if we are to discover the connecting link which binds the facts into a system. Without system, no mutual illumination occurs among the facts; each is opaque and dark. So long as a fact in a science does not yet help explain other facts, and receive explanation from them, it is, as yet, no organic part

of the science, and itself an evidence of the imperfection of the science. The science appears only when the general survey has become possible. Facts are said to be united in principles—energies that include forces and laws.

9. Studying more carefully the function of the synthetic activity of the mind, as seen in the general survey or philosophic activity of the intellect, we see that it is a function of specializing after all, and that there is synthetic specializing as well as analytic specializing. The analytic specializing divides and subdivides the fact or process before it, and goes from wholes to parts. The synthetic activity discovers unities of facts by means of relations of dependence. This and that are parts or results of one process, and so may be comprehended in one. Then, again, it steps back from the discovered unity and looks for its dependence on a higher process, which unites it again with new classes of co-ordinate details. Each new generalization is only an element of a higher generalization.

10. Here is seen the significance of experiment. Experiment starts from a principle already generalized or assumed as an hypothesis. A fact is now to be constructed by this theory or hypothesis. The hypothesis is the guiding light of the inquiry. If it finds the reality in accord with it, there is verification or confirmation of the principle; if the reality does not agree, there is a refutation of the theory. The theory was simply an extension of the conclusion drawn from the general survey from what was before known.

11. Analytical specialization is most successful in the form of experiment, and is guided by hypothesis. Witness the immense fertility of biological research in recent science when its industry is guided by the Darwinian hypothesis. That hypothesis is, of course, like all theories, the result of a general survey, the synthetical activity of the mind. This is what may be called the philosophical activity of the mind. It closes the case, stops the process of analysis and inventory of new facts, assumes that all facts are in, and asks, in view of them: "What unity, what principle is presupposed?" The answer to this question unites into a system what is known, and furnishes an hypothesis or provisional theory for further analysis and inventory of special facts. Thus the philosophical activty enters science as an indispensable factor and alternates with the analytical activity that discovers new facts.

12. But there is another phase of the synthetic activity of mind which transcends this hypothetic synthesis, this making of provisional theories. It is the *a-priori* synthesis that underlies all mental activity. Intellect recognizes, *a priori*, time and space as the logical condition of the existence of all nature — the entire totality of facts and events. What it knows of time and space is formulated in the science of mathematics as so much theory of nature that is known *a priori*, and not in need of experimental verification, because it is certain, at the very outset, that nothing can exist in the world unless it conforms to the mathematical laws of time and space. Besides the mathematical elements of theory, there are other *a-priori* elements equally sovereign in their sway over experience; of such are the law of causality, the principles of excluded middle and contradiction, the ideas of quality and quantity, and the idea of the conservation of energy. The mariner ploughs the sea, looking from wave to wave, passing from horizon to horizon, but he holds on his course only by the observations which he makes ever and anon of the eternal stars. So the specialist lifts his eyes from the multitudinous sea of facts through which he moves, to the fixed lights of mathematical truth, or to the planets of provisional theory, and is able to go forward to a desired haven.

13. The synthetic activity of the intellect is especially partial towards history. It finds in the history of any department a revelation of tendency, which satisfies its love for general surveys. All practical activity, too, finds its nearest affinity in the philosophical view — as has already been shown. The maxim is a guide to the will, and the maxim is a product of a general survey.

*III. The Method of Pedagogical Inquiry Applied to Some of the Problems of Pedagogy.*

14. The general survey of education showed us the four provinces, formed by the cardinal institutions, and a fifth province, that of the school, a growing province in modern times. Again, the school showed us four interests within its province, which we recognized as the primary objects of pedagogical inquiry, while the entire province of education, outside of the school, furnished secondary objects of pedagogical inquiry. Though secondary, these were necessary to all proper direction of the affairs of the school and to all sound criticism. School education assumes its guiding principle from the civilization of the time. Pedagogical

inquiry, therefore, seeks the fundamental principle of its civilization.

15. The fundamental principle of education, which answers civilization, is the development, within the youth, of a rational nature in place of a merely animal nature of impulse and desire. Civilization has reached conclusions during the past six thousand years regarding the theoretical survey of the world by the intellect, and likewise regarding practical conduct — human thinking and human doing in short. The youth should be taught the elements of the theoretic view of the world as it stands written in science and literature, as well as be disciplined into correct habits, and these are habits that enable him to combine with his fellow-men.

What is the course of study which best initiates the youth into these insights into the theoretic view of the world that civilization has achieved?

Here the history of pedagogy is ready with its answer, detailing to us the studies and exercises pursued at each period of the world's history, and by each nation. Here, too, stands the new scientific spirit, ready to make special investigations into the processes and results of instruction in the special branches of the course of study, and ascertain exactly what the pupil gets from studying each branch. The psychological significance, or better, as Dr. Stanley Hall names it, "the educational value" of each branch and exercise in the school curriculum being ascertained, what an immense concourse of problems propounded in our age would be solved. What a number of hobbies, new and old, would be set aside! So with regard to methods. What an opportunity on the one hand for inventory and classification, and on the other hand for close, careful, analytical experiment. Does not too much thoroughness deaden the mind and destroy its elasticity? If the pupil is made to supplement his first insight by a mechanical mastery of the collateral details, will he not lose his enthusiasm and self-activity? Or, on the other hand, will not a neglect of this thoroughness make the youth careless, and graduate him a sort of will-o'-the-wisp, that shuns honest labor? Here is needed an analytical specialized pedagogical inquiry, conducted on a wide systematic plan.

16. What is the law of growth in the pupil's mind, and how connected with his bodily development? How many hours per day, and how many days per week, and weeks in the year, are best for preserving healthful and well-balanced culture? What can

determine this accurately except carefully conducted analytic investigation? The experiments are easily to be found in practice, for there are all varieties of custom in this regard, but who observes and records?

The psychological development raises other questions. What branches of study best give one command of his thinking power, of his memory, of his power of observation? General survey has furnished a number of wise maxims on these subjects, but in hundreds of points there are needed careful analytic tests.

17. Outside of these phases that lie within school education, there are needed many series of carefully conducted experiments, like those initiated by Dr. Hall in regard to the plays of children, and similar matters.

To show how widely the educational influences of the four cardinal institutions reach out, I submit the following survey of the general scope of the education in the family, found by examining the well-known provinces that lie around the child of the average family:

18. The quality and quantity of education furnished in the province of the family nurture, is a very important item to ascertain; because all other provinces of education, and especially the school, presuppose it, and use its results as foundation-stones to build upon. The survey of the general scope of civilization, with its four cardinal institutions, and of nature, with the subdivisions of its organic and inorganic realms, gives us the schedule for this inventory of the items that belong to the general scope of family education.

(*a*) Within the family, the child's first conscious recognition has for its object those persons about him who administer to his wants. He learns to know his parents or the nurses who take care of him. The degrees of relationship, sister, brother, father, mother, aunt, uncle, son, daughter, soon become familiar to him, as well as servant and master; for in a wealthy family he is served, and in a poor family he sees his own family serve others. The relations of dependence and obligation, obedience and guidance, and a thousand forms of consideration observed between the members of the family, fill his mind with its first ethical content.

(*b*) He is, from the first, even in the poorest families, taught a whole code of observances which make up the warp of his life. Food-taking, clothing, the processes of cleanliness, these are his first practical matters of experience. Authority and obedience

produce unity in the family; right and wrong, crime and punishment, become conceptions in his mind quite early. The fruits of co-operation and the evil results of antagonism come under his notice to some extent. The family is the most rudimentary type of social organisms, and a sort of germ out of which all others grow. Once its elements learned, it becomes easy to recognize their separated and magnified forms in the other institutions. The outer world is seen in glimpses by the child.

(*c*) There are the manifold occupations of civil society. He first discovers the occupations within the family that relate to the preparation and consumption of food and clothing, and the care of shelter. The inventory of substances, vegetable, animal, and mineral, raw materials, and manufactured products, what a variety of information the child comes to possess by the daily education which he makes for himself. The relation of the neighbor to his family; the fact that there are other families organized like his own, with minor differences, which are occasions of the greatest astonishment to him. Other vocations than those which he has seen in his family; most important, the relation of dependence which he observes to exist in the community between its members because of the division of labor and traffic. These things are learned, not as principles, but as typical facts.

(*d*) He obtains glimpses of the state and its authority. Officers of the law are seen. He hears of crime; possibly it comes under his observation. The punishment of it is made a constant matter of comment within his family. Then there are political movements and interests which he finds his family taking active part in. The parade of soldiers makes a most vivid impression on his mind. These and like experiences gradually develop in his soul a constantly dwelling presence of the idea of the state with its laws, and its means of enforcing them. The items are not scientifically or systematically joined, but are present, nevertheless, in a practical body of silent maxims of conduct.

(*e*) Next, the highest institution, the church, is one of the earliest objects of the child's experience. Its doctrines of the origin and destiny of man, its prescriptions of forms and ceremonies and of attitudes of feeling, thought, and action essential to eternal welfare, enter his wondering soul in colossal shapes. These religious ideas and forms which he finds his family venerating; or, if not held in the highest respect by his own family, at least by other families. These religious ideas are found by him

to be fundamental as regards human conduct, and, as such, form and educate him, whether he will or no. The child's knowledge is not a classified and arranged knowledge, but it is a real knowledge, nevertheless. The items of his thought are typical facts, and the logical process of analogy that elaborates the facts into experience.

(*f*) Although he does not systematize and classify his knowledge of matter under the heads of primary and secondary properties, or recognize his fragmentary information as belonging to meteorology, or botany, or zoology, geology, or astronomy, yet he has typical facts relating to each and all these sciences. The phenomena of the atmosphere, the seasons of the year, the changes of the moon, the power of the sun, the nature of soil and rocks, of trees and plants, the vegetable process of growth and decay, the parts of the human body, the habits and peculiarities of animals—there is no end of the details in these directions observed by the average child in the family. It is true that there is a considerable difference between the inventory of the mind of the city child and that of the country child, but, as regards the superiority or inferiority of the items, it is not easy to assert which child has the advantage. The more important items of experience are identical; the conceptions that relate to mutual services, traffic, or trade, moral observances, authority and obedience, the existence of government and its power to secure obedience to its laws, these and similar come alike to the urban and the rural children.

(*g*) Most important of all the items of family education is the intellectual nurture received by the acquirement of the mother tongue. The child learns to name the things, actions, and relations about him. He learns how to communicate his impressions to others, and how to avail himself of the experience of others by the answers to such questions as what, how, why, for what purpose. He thus re-enforces his own feeble powers of sense-perception and reflection by those of his fellows. The fact that language deals with general ideas and concepts, rather than with individuals, is the most important fact here.

19. For pedagogical inquiry, there is an endless series of problems relating to the psychological significance of typical facts of experience. Suppose one were to trace out the actual series of ideas, feelings, and actions set in motion by the first visit of a child to a grocery store, where he has obtained a glimpse of the collection and distribution of goods, which forms so much of the work of human society. Take the conception of a road or street. (One

will find in Carlyle's Sartor Resartus an interesting reflection on the significance of this item to the child.) Take the typical fact of a wagon, or simply that of a wheel; a piece of woven cloth or a plaited basket; the kindling of a fire; the first bargain and sale or barter; the first observation of the sacredness of the right of property; of a crime and punishment; the sight of a train drawn by a locomotive; the view of a river and a bridge; a telegraph instrument or a telephone.

What an inestimable service could be done to education if a hundred of these typical facts were investigated and their scope and limits mapped out by experiment and observation. In making an inventory from a general survey of the typical facts which come under the observation of the child, it looks at first as though his experience includes nearly all that is essential to educated man. But the important difference lies in this: the child does not yet form conceptions to any very great extent in a strictly logical sense, but does his thinking with typical facts and analogy, while the school education changes these typical facts into conceptions. The scientific conception relates the individual fact to its genesis; in other words, it places it in a perspective, seeing it in its origin and development, relations and dependences, and final purposes. Thus the scientific knowledge makes each fact throw light on all, and it brings about a habit of seeing systems instead of isolated facts and events.

The fall of an apple, observed by a swine, meant only the single relation of food, and he ran at once to devour it. But Isaac Newton, sitting near by, looked up to the tree whence the apple fell, and saw the moon through the branches of the apple-tree, and recognized the uniting law of gravitation which made the apple and the moon instances of one identical process.

The most important field of pedagogical inquiry is this one of discovering the means of converting a typical fact into a conception—a particular observation into a thought. Such inquiry will lead to skillful methods. It is a mater of congratulation for us teachers, that distinguished specialists have turned their attention to these matters so important to us. It is for us to enter with zeal into this movement and gladly avail ourselves of all the light it furnishes. More than this, it is our duty to assist it by investigation in chosen special fields, properly co-ordinating the work of analytical inventorying with general surveys.

All of which considerations are respectfully submitted.

WM. T. HARRIS.

## DISCUSSION OF MR. HARRIS' PAPER.

[*Reported by W. H. Payne.*]

MR. HALL—I observe that Dr. Harris uses the term "pedagogy," although he expressed such a contempt for it last year, at Madison.

MR. HARRIS—The use of this term has been forced upon me.

MR. HALL—I am glad to note that the paper expresses an appreciation of the method of pedagogical inquiry, which I am pursuing. It is a mistake to think that children reason. Reasoning is not the object of education. The real object is the development of manhood. The typical reasoning is taught in the laboratory. The process of reasoning and the process of observation are the same. The great educational question is to mediate between generalization and specialization, and the true mode of inquiry is a system of averages.

MR. HARRIS—I have always believed in specialists. We must have facts before we can explain them; but a general survey is essential to science. I do not hold that a child's activity is of no account because it is spontaneous or unconscious. The scientist need not have a philosophic consciousness. From the first, the child makes a general survey; he sees facts colligated by the principle of similarity. The scientist must not forbid general ideas.

MR. TAPPAN—Conclusions in pedagogics, as in all sciences, must be held subject to the observation of facts; but observations, to be of use, must be guided by the best thinking. The difference between a child and a man, intellectually, is not in the ability to make an inference from known premises, for that is easy; but it lies in these two particulars: (1) in the amount of knowledge; and (2) in the faculty of introspection, the power to observe one's own mental processes.

MR. HOOSE—I am convinced that a child can reason just as correctly as an adult on the facts he actually has. Both reason in the same line, and by the same general method. The theory that children observe, rather than reason, is wrong. The one purpose of teaching is to enlarge the scope of facts.

MR. HALL—The study of mind by observation, rather than the study of natural phenomena, is now rising in importance. The high *à-priori* method is giving place to the experimental method; and specialization is necessary, because the world of fact is so vast. This method assumes that the soul of a child is the highest thing in the world. In the soul of a child are reverberations that go back to the very beginnings of things. Some who have been studying the contents of children's minds, now propose to turn their attention to the Concord Philosophers!

MR. HARRIS—My special point is that a general survey must precede specialization, and that such a survey is essential even to the study of children. Mind must be studied by introspection; and for this there is no substitute. Distinct consciousness is a bar to progress from one stage to another. Children do not reason by the inductive and deductive modes, but by analogy. You may drive a four-horse team through a child's reasoning.

MR. HOOSE—Children are capable of pure reason.

MR. HARRIS—They reason only by analogy.

THE CHAIR—What is meant by children?

MR. PAYNE—Infinite mischief has been done by drawing a sharp line of distinction between the mind of a child and the mind of an adult. There is complete continuity of growth from the one to the other. The child discerns

obscurely, and the adult definitely. This is the essential difference in the two cases.

MR. HARRIS—The child starts with typical facts and passes from these to clear conceptions. The source of our chief errors in teaching is in making too sharp a distinction between the mind of a child and the mind of an adult.

MR. EATON—Would you test a child of three as you would test a child of six? At this point lies a great error in our modes of examination.

MR. HOOSE—The functions of both minds are the same. The element of growth is admitted; but the scientist uses the same mental powers as the child.

MR. BARRINGER—Does Mr. Payne mean that a child does not see any object, as a piece of cake, clearly?

MR. PAYNE—I mean not vision alone, but conception.

MR. HARRIS—The laboratory does not avail in the study of ethics. This method instructs us only in the physical conditions of mental life.

MR. HALL—I thought I was almost in harmony with Dr. Harris, but I find I can not accept what he says about religion. The laboratory method is that of observation or examination. By this method it has been discovered that there is no savage tribe which has not a belief in a Supreme Being.

MR. HARRIS—It has been proved that some savage tribes have no rational idea whatever of such a Being. I regret that Dr. Hall is so uncertain as to what he believes. No later than last evening, he expressed his approval of the main doctrines of my paper.

MR. WICKERSHAM—In this whole discussion, we have ignored fatherly and motherly instinct. For the instruction of a mere child, would we choose a philosopher, inductive or deductive, or a motherly woman?

## VIII. PEDAGOGICAL INQUIRY.

G. STANLEY HALL.

It is many years since the systematic observation of infants began. Some observers have duly weighed or measured them; others recorded by methods, always more or less imperfect, their first sounds; others their efforts to hold up the head, sit, stand, or to use the eyes and hands, to tell distant objects and strangers; the earliest manifestations of pleasure, pain, fear, jealousy, anger, etc. The valuable works of this kind now number more than a score, of which the fullest and most systematic is the large volume of Professor Preyer, the physiologist of Jena, entitled "The Child's Soul" (*Die Seele des Kindes*), which has not been translated into English. Several manuals have been issued with methods and directions by which any intelligent parent can keep valuable records. Bernard Perez's well known and suggestive little book, *The First Three Years of Childhood*, has just been published in English by Marquis & Co., Chicago. Thus far there seem to have been more new problems for further research suggested than answers agreed upon; but this does not interfere with the richness of suggestion which thoughtful teachers may find even in these crude beginnings of a science of infancy.

In 1869 the Pedagogical Society of Berlin issued a circular, requesting the masters of the eighty-four established schools of that city to ascertain how many of the children entering the primary classes had seen and could name certain common plants, animals, and insects; had taken certain walks, visited specified parks, museums, etc.; had acquired certain familiar notions of God and Jesus, had heard certain stories from the Bible or from Grimm's Marchen Anthology. The revelation of ignorance afforded by the results (see Berlin *Statistisches Jahrbuch*, viertes Jahrgang, S. 59) was great. The method of conducting this examination had certain grave defects, and, after much preliminary and tentative experimentation, a series of tests was agreed upon for Boston children just entering school, the results of which should be well pondered by every primary teacher who would not waste time in cultivating a desert, or in assuming the existence of knowledge which children have often not acquired. See full results in *Princeton Review*, May, 1883.

Superintendent J. M. Greenwood caused similar tests to be applied to six hundred and seventy-eight children of Kansas City, of whom forty-seven were colored, by methods which he does not report. His examinations were made in the months of March, April, and May, or near the end of the first primary year, rather than at the beginning of it, as in Berlin and in Boston; and they show that children of Kansas City, after nearly a year of schooling, were much more familiar with common country objects than the children of Boston; and, what is most interesting, that the colored children are less ignorant of them than the white. This latter result may be an illustration of a not undisputed law that those whose period of mental development is shortest, unfold fastest while it lasts. This valuable contribution to the subject is reported in the proceedings of the National Association last year, at Madison.

Much light is shed upon this general subject by a very suggestive address of Professor Wm. H. Brewer, of Yale College, entitled "The Educational Influences of the Farm," and published in the *Report of the Connecticut Board of Agriculture*, January, 1884, which should be carefully read by every teacher interested in this subject.

The careful study of children of greater age has also been begun. Frœbel's attempted systemization of the play instinct, Herbert Spencer's theory, now so widely current, that it is the culture instinct, and that its vigor measures the capacity for culture, and Herbart's use of it as the key to his schemata of interests, have made very important additions to the psychology of pedagogy. This has been investigated from original sources, as well as in literature, by W. W. Newell's "Games and Songs of American Children" (Harpers, 1883). In these he finds the last echoes of ancient popular poetry, that which fulfills the conditions of healthful amusement better than any thing else, the heart unfolded and reflected in the imagination, etc. This work and other yet unpublished material, gathered from children and sent to the present writer by teachers, have much suggestiveness respecting the introduction of children to the study of language, and even literature. Much is now written on the subject of play in German pedagogy, but neither our collections of material nor the insight of theorizers is yet sufficient to reveal its real pedagogic value, or the best ways of its utilization.

Another line of research is suggested by a remarkable paper of

John Johnson, Jr., entitled "Rudimentary Society Among Boys," published in the *Overland Monthly*, October, 1883, which deals with the parceling out of rabbit-catching land, the appropriation of nuts, a currency of "butters," with paper notes of hand for the payment of the same, etc.

Dr. Hertell's *Overpressure in High Schools*, Denmark, perhaps the most valuable of recent hygienic books, is beyond all comparison the most thorough work on its topic, and is also one of the best illustrations of the method we are advocating.

A much needed topic of investigation, which should be conducted independently for boys and for girls, as well as for children of different ages, is concerning favorite books and reading. If, for example, each of one or more hundred boys of equal age or school grade, were asked to name a definite number of such in order of preference, the tabulation would be valuable in many ways. This has already been partially attempted by Dr. B. G. Northrop and by several Boston investigators.

Children's lies, although one of the most delicate and difficult subjects for research, have proven very fruitful, and a special report upon this subject is now ready for the press. From Mrs. Opie and Heinroth down to Bourdin's *Les Enfants Menteurs*, the topic has been felt to be an important one from the stand-point of moral education.

Kocholtz has published an important table on the order in which German children acquire the power to make the simple phonic sounds in their language, which has proven useful for the instruction of primary classes, as well as for deaf-mute schools. Although a number of well-compiled child vocabularies have been published, this kind of tabulation has never, to our knowledge, been seriously attempted in English.

A number of parents keep samples of all their children draw, from the earliest scribbles up through the grammar school, unbeknown, of course, to the children; and some are now seeking to follow Frœbel's advice and keep a "life book" of each child, recording the stages of its physical and mental growth, its liabilities to disease, striking incidents, experiences, and peculiarities, their own endeavors and motives, etc. This book is to be kept without the child's knowledge, and given him at maturity as a guide to his choice of profession or calling, physical requirements, etc.

The friendship and dislikes, including jealousies and revenge, of children, with a view to formulating the qualities of favoritism or unpopularity in teachers and playmates, is another rubric on

which material is slowly being gathered. Their superstitions and, sometimes clearly connected with this, their secrets reveal many phases of child-life which it is important for teachers to know. Their sense of justice, squareness, fair play, as shown in rules of games, fagging of all sorts, taking prompts, and cribbing, etc.; the manifestations of self-consciousness in children, their passion for immutation, whether in single acts or of the style of great authors, etc.; illustrations of their constructiveness, whether with tools or pencil, of precocities in special directions, as music, mathematics, etc., and of special defectiveness, nervousness, irritability, erethic or neurotic habits, and their relation to incipient unchastity, intemperance, and perhaps even cases of conscience and conviction—on these topics, and on all in this paragraph, work is only just beginning, and any observations, impressions of teachers, printed or written, or the results of any system of investigation which any teacher or superintendent who reads this report may undertake, can hardly fail to have value, and, if forwarded to the writer, will be incorporated with grateful acknowledgment, in the slowly forthcoming future reports on this subject.

The manners, customs, songs, etc., of college and university students in this country and Europe are already being gathered as the basis of future generalization, any contribution to which, or any reference to the literature of which will be thankfully received.

Immediate results are not to be expected in this field. The work is one not of years, but of decades. It is prompted and sustained by the anthropologic tendency of philosophic and scientific thought, and much light is reflected on it by the empirical study of the instincts of animals, and by that of the customs and beliefs of savage races. We must lose nothing that the past can teach us. The teachings of the great philosophic minds, which have done so much for their own respective age and lands, must be carefully pondered, and none of their wisdom be allowed to escape us. But the time for mere abstract theorization on their foundations is past. Comenius was inspired by Bacon and Locke, as was the whole object-lesson system. Pestalozzi, Frœbel, Herbart, and all who in modern times have added any thing whatever of permanent value to the repertory of educational methods, have done so as a direct result of more or less systematized observation of child-nature as it is. The general line of work here indicated, although no doubt very crude and imperfectly methodized as yet, as well as imperfectly comprehended by those most interested in it, and quite likely to be enlarged and reconstructed in more ways and times than we

now dream of, points out, in the writer's opinion, the general direction from which real progress toward a pedagogy which shall be more professional and scientific, is to be looked for.

In further illustration of pedagogic research, the following report of progress has just been made on another special topic, viz.:

## CHILDREN'S COLLECTIONS.

Miss Sara E. Wiltsee, who has been for several years a systematic observer of childhood, has lately sent to the writer, along with a mass of other valuable but as yet undigested material, the answers of two hundred and twenty-seven Boston school-boys of fifteen and sixteen years of age to a short set of questions about their collections. Of this number only nineteen had never made collections they deemed worth reporting. One hundred and forty-four reported collections of two kinds of objects, ninety-five of three kinds, twenty-eight of four kinds, and a few of five or more kinds. Stamps were most frequently collected; then followed, in order of frequency, coins; marbles, sometimes to the number of several thousand; advertising or business cards; pictures; stones; ores; minerals; and sometimes bits of brick and chalk; woods; leaves, or flowers; insects; eggs; shells; scrap-books of all sorts (generally funny stories), imprints of the die of local post-offices, riddles, autographs; buttons; nut-galls; birds' nests, smooth or colored stones; and even toadstools, peachstones, lists of names, tools, and many other things. Of the three most common collections, that of marbles nearly always comes first, and begins, on the average, very soon after the beginning of public-school life, and lasts from three to six years. The passion for stamps comes later, and for coins later yet; the average interval between the latter, as well as their duration, can not be inferred from the data. These collections have been made quite independently of school work, and, so far as can be inferred from the writing, spelling, and syntax of the written returns, the brightest boys have made most collections, and in each of these respects the nineteen boys who have no collections to report are below the average, though by no means always the worst.

Several observers have sent in returns from school-girls of equal age to similar questions, but as yet the returns are too few and too imperfect to have much statistical value. It appears, however, that the passion for collections is less strong in girls, and the objects collected are different. Little girls often collect bows from adults, keeping tally on bits of paper, and older girls collect flowers, cloth and paper patterns, bric-à-brac, keepsakes, etc., as well as in many cases making the same collections as the boys. It is evident that more data are wanted for both sexes before the effects of age, temperament, locality, conditions of life, sex, etc., can be determined, and it is to be hoped that teachers or superintendents who have superior facilities will address themselves to further studies of this important topic.

It seems already plain, however, that this instinct is a strong and almost universal force in human nature, which the school should study and use more than it does. It is one of the chief juvenile expressions of the instinct on which the induction and specialization of natural science rests. Museums of all sorts and sizes, literary collections, and even the gathering of the above data about this instinct, rest on it. In fact, almost any and every interest may prompt collections, and be made the nucleus of scientific culture sometimes for the very boys who get least from the ordinary school. There might easily be in most country towns, if not in each school building, small working collections, made largely by the

children themselves, illustrating local geology, woods, plants, birds, and animals, mounted or put up in the most educational way, and, with a few pictured books, made the basis of general or of class exercises. This, we believe, may at least be suggestive in solving the great question how more and better natural science may be taught in schools of the lower grades. Teachers of literature, also, even in lower grammar-school grades, have induced their pupils to gather from many sources, by scrap-books and otherwise, literary specimens which especially interested them, and thus, as it were, to make individual reading-books—their own in a sense, which is of great educational significance.

But if data like the above show the force, they do not suggest the danger attending this passion, viz.: that it degenerates toward the blind mania for collecting objects (*Sammeltrieb*) seen in certain forms of mental disease, and even in some species of animals. Our returns show scores of boys who collect stamps or coins with very little of the knowledge of geography and history needful to give a rational interest to their collections; who gather blindly and mechanically large numbers of eggs with no knowledge of the species, or merely the tails of birds or squirrels, with not only no knowledge of their characteristics or manner of mounting, but without even the most common hunter's knowledge of their habits. When we reflect how much might be taught incidentally by the rapid way of suggestion, if given while these interests were at their hottest, and put tactfully, perhaps in the form of directions for improving collections already begun, we can realize how considerable is the educational loss.

And yet correctives are not so easily made effective as would at first seem. Collections do not always imply the knowledge or even the high degree of mental curiosity they are wont to suggest. Museum values and scientific values are often divergent, and may be almost opposite. Much might be written of the cases in which undue haste to catalogue or to collect had robbed objects of scientific worth. How often, again, do we see in our laboratories even advanced students making and mounting histologic sections day after day, to get good collections of slides, in a thoughtless and mechanical way, or even in original research repeating observations and enlarging protocols without so carrying every thing in mind that each product is subjected to the highest degree of scrutiny it is capable of, as they go along, and thus lose time under the illusion that they are doing real scientific work. It is such hard work to think, and there are so many proxies and simulacra of thought that deceive even well-trained men—it is so much easier to get ready to think, as the miser hoards in order to get ready to live—that the way of true science is indeed straight and narrow.

All this, nevertheless, does not make us for a moment doubt that this is an educable instinct, and that it has head enough, wherever it is wisely turned on to school mechanism, to quicken especially all those elements of school-work that are associated with Comenius, Locke, object-lessons, and science-teaching. It is not ready-made, purchased, but individual collections, with the sense of personal ownership on the part of those who made them in no wise relaxed, but used in a way to make the school-house interesting, because reflecting at the same time the local characteristics and local pride, that we need. How each of the above kinds of collections and others can best be utilized in or by the school, is a problem which only the experience of the practical teacher can solve; and when it and the other unfinished questions, above suggested, are determined, it will make, if we are not mistaken, a valuable as well as, for the most, part a new chapter in pedagogy.

# REPORTS ON EDUCATION

AT

## *THE WORLD'S COTTON CENTENNIAL EXPOSITION*

At New Orleans, La., 1884–5.

At the last annual meeting of the National Educational Exposition, held at Madison, Wisconsin, 1884, Gen. E. A. Burke, of New Orleans, Director General of the World's Exposition was present, and presented the claims of the Exposition on the consideration of the educators of the country, and invited the members of the Association to attend the Exposition. The invitation was accepted by this body, and a committee of fifty was appointed by the Association to specially represent it at New Orleans, and was instructed to make report to the Association at this meeting. Arrangements were made for the committee to meet at New Orleans at the same time with the Superintendents Department of the Association and the International Educational Congress in February, 1885. The committee met at New Orleans at the Tulane University, at the time appointed, and organized by the election of A. R. Taylor, of Kansas, as secretary, and your reporter as chairman, and feeling that a detailed report of some of the leading features of the Congress would be appreciated by the Association, sub-divided the work of examination and reports on the special educational work of the Exhibition as follows:

The Kindergarten Exhibits;
W. N. Hailmann, Indiana.

The Exhibit of the World's Exposition;
John Hancock, Ohio.

Exhibit of the United States Government;
E. E. White, Ohio.

Educational Exhibits of Foreign Countries;
W. T. Harris, Massachusetts.

The Educational Exhibit of Colored People;
Warren Easton, Louisiana.

The Woman's Department of the Exposition;
May Wright Sewall, Indiana.

Schools of the Christian Brothers;
M. A. NEWELL, Maryland.

The Educational Effects of the Exposition on the South;
A. D. MAYO, Massachusetts.

Normal Work at the Exposition;
F. LOUIS SOLDAN, Missouri.

Written Work; JOHN W. DICKINSON, Massachusetts.

A SUMMARIZED REPORT BY THE CHAIRMAN, WITH A REPORT ON THE EDUCATIONAL CONGRESS.

The International Congress, the Department of Superintendence, and the Committee of the Association were given a warm reception in Werlein Hall on the afternoon of February 23d by the State and city authorities and the teachers of New Orleans, the city schools having been granted a holiday for that purpose. Addresses of welcome were made by Judge Fenner, of the State Supreme Court, and Col. William Preston Johnston, president of Tulane University. Each spoke most cordially of the work of the Association, and expressed great confidence in the educational results of the Congress and of the World's Exposition, then so fully presenting the achievements of this wonderful age of industry, of art, of science, and of popular education. Hon. John Eaton, Commissioner of Education, replied on behalf of the Congress in a masterly review of education as the controlling factor in all civilization. John Hancock, LL.D, of Ohio, for the Department of Superintendence, Dr. A. D. Mayo for the "49,700,000 people longing for deliverance from ignorance," and President F. L. Soldan for this body, spoke eloquently of this great educational revival of the ages.

The Department of Superintendence of the National Educational Association occupied the forenoon of each day, while the International Congress of Educators held its sessions in the afternoon and evening. The sessions extended through the 27th. General interest was manifested in the discussions. It is hoped that the proceedings of the Department of Superintendence will be published in full, together with the proceedings of this meeting.

The Congress held its meetings in Tulane Hall, Tulane University,—that young giant of the South which the munificence of Paul Tulane has brought into life. Your committee is under many obligations to President Johnston and his gentlemanly faculty for innumerable courtesies extended.

A wide range of topics was most ably discussed by educators of our own country, and by Col. G. W. Hicks, Inspector of Schools for

Jamaica; Prof. J. L. Hughes, of Canada; John Hetz, Esq., of Switzerland; Prof. L. W. Mason, of Japan; Hon. T. Hattori, Commissioner from Japan; M. Buisson, Commissioner from France; Brother Azarias, of the Christian Brothers, and others. The papers presented were of unusual merit, and are invaluable contributions to pedagogical literature. It is understood that they will be published in book form by the Bureau of Education.

Allow me to preface my report by saying that the International Cotton Exposition of New Orleans was, as a whole, one of the most remarkable products of our time and country; and in its immense average of buildings, in the magnitude and extent of the general and special exhibits, in the variety and wealth of the material from every State and territory of our own country and from almost every civilized foreign land, in the systematic classification and arrangements of the various departments, and in the immense contributions and orderly grouping of the educational work by cities, States, and nations, the Exposition has had scarcely a superior in modern times. It was in the truest sense a World's Exhibit, with the advantages which always falls to the latest collection in average, the busiest, the fullest of scientific discovery, the most prolific in the works of industrial skill and artistical development, and the most active in educational evolution and progress. We must remember that it was held in that portion of our country which only twenty years ago emerged from the gloom, darkness, and devastation of the civil war, with its wealth destroyed, its industries prostrated, its energies paralyzed by defeat, with little left but heart and hope with which to press forward into the future; with an ignorant and helpless race of millions on its hands, to cast off or to lift up and educate for manhood and true citizenship. This fact made this Exhibition the more remarkable, and illustrates most wonderfully the uprising, elastic force of a great body of people, delivered from the thraldom of a crushing burden, and putting on the free activities which this emancipation conferred more completely upon the white than the colored race. Twenty years of industry, under the productive conditions of free labor, had done more for the South than two centuries of slave-labor. This Exhibition was a revelation of the wealth of undeveloped resources of that vast land and people we call the South, and was the earnest and pledge of the sincerity, the heartiness, and the self-devotion which makes it not only in name but in fact *The New South*, a land over whose present and prospective prosperity the whole country may well rejoice.

The Exhibition was a school for the people, and hundreds of thousands attended to learn its lessons. The variety and wealth of

its object-lessons were studied by tens of thousands of children, as well as by multitudes of busy men and women. It is estimated that thousands of teachers were in attendance from all parts of our country, but more especially from the Central West and Northwest. Entire schools, with their teachers, came from Texas, Mississippi, Alabama, and Louisiana. Teachers, students, and even school children were noticeable everywhere, with pencil and note-book, preserving facts and lessons. Each State and section had its peculiar features. The great material wealth of the Northwest and West was magnificently displayed. King Corn of Kansas and King Wheat of Minnesota disputed sway, with King Cotton of the Gulf States. The East and North sent the products of their shops and spindles, and what was wanting in quantity was equalized by the quality of the exhibit. The Government exhibit in the Government Building of ten acres was probably the most systematic and perfect ever made by any country, and with these were presented in great detail the material agencies which minister to educational progress, and the products which measure its advancement and discover its methods. While a catalogue of the Educational Exhibits, as a whole, is in course of preparation, I will not anticipate it only to say that after visits and studies at Berlin in 1873, in Philadelphia in 1878, in Paris in 1878, in London in 1880, I have seen no exhibition which had more valuable or instructive features, and it will not be invidious to state that Iowa, Minnesota, Ohio, Indiana, Illinois, Massachusetts, Rhode Island, and Louisiana presented material and work, the outcome of the public schools, of which any people might well be proud, and *the quality of which* has not been surpassed anywhere, not even at Madison in 1884. Add to these State exhibitions, those of the societies of the Christian Brothers, which are faithfully reported by Dr. Newell. This large collection of exhibits from various cities of our country showed great fidelity to correct educational principles and methods on the part of the directors of this system of schools. The written work was excellent, and well graded through elementary or secondary schools and colleges. The work of art schools, polytechnic schools, and industrial schools was equally superior; and the hearty welcome given to the Brothers, and their cordial response, were indicative of the union which exists between all true teachers, of whatever name or grade. Dr. Newell well says: "Of the many thousands who visited the Educational Department of the Exhibit very few had ever heard of 'The Christian Brothers,' and not one was prepared to find, under this title, an exhibit so varied, so systematic, so complete, so suggestive, so instructive."

Passing from the interesting work of these devoted Christian edu-

cators we come to the great exhibit made by the Bureau of Education at Washington, under the direction of our U. S. Commissioner, General Eaton. So complete and well arranged an exhibit of American education has never before been made, and its extent and variety illustrate the value of that department of our educational work. The history and full development of the American public school were comprised within this vast display, and by its arrangement one could proceed in the study from the infant school and the kindergarten through all the phases and grades of educational work and the agents which aid and supplement it. Great credit is due our national authorities for the breadth of their plans and the most satisfactory illustration of our educational systems.

Of the foreign exhibits, France was the leading exhibitor, and the amount, richness, and value of the material can only be hinted at. Education was presented in its concrete illustrations from the cradle through the university. Maps, charts, models, written and printed work, in every form of ingenious and beautiful design, such as the French people have such power to bring forth, were here presented. The literature of education in its text-book and general form was almost exhaustively sampled, and the publishers of Paris sent a collection of art and other works worth several thousands of dollars. As might be expected from a nation of artists, the arrangement was natural and highly artistic, and the objects were studied with great satisfaction by our teachers. To M. Buisson, the director of the French Department, the American educators owe a debt of gratitude for his courteous reception of visitors to the department and the intelligent description given of French schools and their work.

Japan sent a very full collection of educational material, showing thereby what wonderful advances have been made by this old nation in its new educational departure. As Dr. Harris, in his report, has given special attention to this field, as well as to that of the whole foreign exhibits, it is only necessary for me to add that these exhibits would be of permanent and increasing value in a national museum; and that by the courtesy and generosity of the French, Japan, and English, and other authorities exhibiting, the Bureau of Education is already in possession of much of their valuable display.

Without prolonging this report to refer even by name to other exhibits, I will transmit to the Association the reports accompanying, and request that some arrangement be made for the publication of the same.

THOMAS W. BICKNELL,
Chairman of Committee to N. O. Centennial Cotton Exposition.

## EXHIBIT OF THE U. S. BUREAU OF EDUCATION.

Having been appointed a committee to report on the exhibit of the Bureau of Education at the World's Industrial and Cotton Centennial Exposition at New Orleans, the following is respectfully submitted:

This exhibit, located in the southeast gallery of the government building, is situated between the two most complete education exhibits in the Exposition, and, with little doubt, the two most complete ever shown in the world,—the French exhibit, on the one hand, and, somewhat farther away, the exhibit of the Christian Brothers on the other. The French exhibit is a noble showing of what a great nation with a thoroughly organized and centralized system of education, under the direction of a Cabinet officer, with full powers and thoroughly qualified for the discharge of his duties, can do for the successful training of its youth in all grades and kinds of schools. The exhibit of the Christian Brothers differs in origin very widely from that of the French. The latter is the outgrowth of national effort; the former of the effort of a trained order of teachers, who, ignoring all the allurements of distinction and wealth, have devoted their lives, with a marvelous fidelity of purpose, to their chosen vocation. In the language of one of their number, "We live but to teach." These two exhibits, unlike as they are in their details, are filled with such an array of valuable educational material as may well cause the workers in American State schools to use a moderate tone in speaking of what those schools have done and are doing. In one feature these two exhibits are strikingly alike; they are both exceedingly rich in the quantity and quality of the material exhibited as aids in objective teaching. Here it would be difficult to decide which is the superior. Both seem about equally fertile in invention, although they vary somewhat in the directions in which their ingenuity has been most largely exercised.

Standing between these two remarkably attractive and instructive exhibits, as it does, it must be confessed our Bureau exhibit suffers to some extent in comparison with their brilliancy. That this has arisen from no fault of the head of the Bureau, all the well-informed are thoroughly satisfied. In one of these exhibits is seen the concentrated power and intelligence of a nation proud of what it is doing in every department of education; in the other, the enthusiasm and skill of a devoted order of trained laborers, also working under a

centralized authority. In contrast with this, whatever the Bureau has accomplished has been largely the result of moral influence, and not of authority. It has no great reserve of school material to fall back upon. All that was to be put on exhibition was to be gathered up from such schools as might be persuaded to contribute to the object, augmented by such apparatus as the commissioner should be able to create for his department, within the limited time at his command, between the announcement and the opening of the exposition. With all the difficulties to be encountered, it is not surprising that the exhibit of the Bureau did not reach a higher standard of fullness and excellence; but the wonder is that it is as full and as excellent as it is. Perhaps, too, we should be doing nothing more than strict justice to the Bureau if we should include in its exhibit all the education exhibits in the galleries of the government building, embracing those from the States, from single institutions, from societies, and the two great exhibitions above referred to; for all these were called into being largely through the exertions and liberality of the head of the bureau.

The commissioner assigned the space for these exhibits, gave most of them pecuniary aid from the appropriation made to his department and through his representation. Hon. Sydon A. Smith has had a watchful care over them from the beginning.

M. Buisson, the French commissioner, at a public meeting, has acknowledged in fitting terms the obligations of his department to the commissioner for the successful efforts made by him by personal interviews with the French authorities to induce the government to make a great educational display at the exposition. At the same meeting, a series of resolutions were adopted by the representatives of the other exhibits returning their cordial thanks to the commissioner for providing means to represent at the exposition the various phases of education at home and abroad, and also to him and Hon. Sydon A. Smith for their untiring attention to, and discreet supervision of, these exhibits.

If, then, we take a comprehensive view of what the bureau has actually done in setting up the education part of the great exposition, instead of restricting ourselves to a view of what has been technically called the Bureau Exhibit, we shall have for consideration an exhibition of wonderful extent, variety, and brilliancy.

These remarks have not been made by way of apology for the bureau exhibit, even when taken in the restricted technical sense of the term,—for it needs none,—but in order that the difficulties attending its setting up might be at least partially understood, your committee,

after this explicit declaration, need give your honorable body no further assurance that this exhibition is one of very high order and worthy heartiest commendation.

The purpose of the Bureau exhibit, it is evident, even from a casual examination, has been to show, so far as practicable, in logical sequence, the material of education in all its forms, and at the same time to indicate the leading features of its history in this country.

In tracing the arrangement of the exhibit, we may begin with the appliances fitted to that part of the child's formal education preceding its entrance upon its school career. This includes models of buildings, specimens of furniture, and articles for the amusement of children, such as is used in the Fitch Creche at Buffalo, N. Y., as well as kindergarten material. The Creche, though well and favorably known in Europe, is a new institution in America, and this exhibit will doubtless make it better known to our educators and humanitarians. What its value may be when transplanted to a country differing so widely from those of the Old World in social and political institutions, only experiment can determine.

Kindergarten education is presented in the concrete in a school of children gathered in from New Orleans families, and taught by Mrs. Anna B. Ogden, a teacher of deserved reputation in this special class of schools. By means of this school, a fuller knowledge of the purposes and methods of the kindergarten has been spread over every part of our country. The value of this feature of the exhibit is by no means small; for nothing has so impeded the growth of the kindergarten scheme as the haziness of the knowledge possessed of it, even on the part of teachers otherwise intelligent in their profession. The work of the school was supplemented by the able discussion of the subject in the International Congress of Educators.

School architecture naturally occupies a prominent place in the exhibit. For, though this has been a matter for active investigation for many years, it is by no means certain that even an approximation to perfection has yet been reached in it. To combine perfection of heating and perfection of ventilation in school building is no easy task, while a failure to do this involves most serious consequences. And to such failure do we owe most of the evil results in school life, which by so many are attributed to overwork. The subject is treated historically, beginning with the model of a primitive log building, and passing on upward to the elegant and commodious school-houses of the city of Denver, wisely chosen as models. The value of the photographs of these buildings are greatly enhanced by full floor plans of the several stories. The exhibition is completed by a model

in wood of a building in Washington, D. C., designed to be as near perfect in all its appointments as the best information and care could make it.

Hundreds of photographs of the exteriors of buildings are shown in the State exhibits; and it is greatly to be wished that more interiors with plans of seating, warming, and ventilation, with specimens of furniture, had been given.

Next in order are exhibited the appliances for teaching in the primary grades, the furniture for such grades, specimens of the work of pupils in clay modeling, slate work, drawing, examination papers, etc. This work, embracing that of the first four years of school life, comes from the schools of Washington, D. C.

The course of instruction in the grammar schools is introduced by specimens of sewing from the Boston schools. Then follow the appliances for teaching geography, with the results of teaching that branch in the shape of maps, and of clay models of countries, with specimens of the vegetable and mineral productions of the different portions set into the clay models. Sets of examination papers are also given.

The high school exhibit includes the text-books used in Washington High School; photographs of the building, the chemical and botanical laboratories, the library, drill hall, and physics lecture room; also, bound volumes of examination papers.

The normal school at Washington and the one at Baltimore have been drawn upon to show the work of this important department of education. From the first are shown appliances for teaching in the lower grades of the public schools, botanical specimens, and a mineral cabinet. From the second, general botanical work, water-color drawings of plants, and, on the same sheet, the leaves and flowers, conventionalized and worked into decorative designs,—producing most ingeiuous and beautiful effects.

The college department of the exhibit, besides photographs of buildings, contains specimens of handicraft work by students from agricultural and technological schools; astronomical and surveying instruments; models of farming implements, chronologically arranged; model of a bridge, wharf, and railroad tunnel; models in geometry, and a college cabinet.

For physical training is shown a complete gymnasium, containing apparatus suited to all grades of pupils, with a teacher in attendance to explain and illustrate its use.

The art display is largely industrial, and the drawings are from the public schools of Chicago (all grades), from the Philadelphia School

of Design for Women, and from the Philadelphia Museum and School of Industrial Art.

In the library section is shown the progress made in the improvement of text-books, beginning with the "Hour-Book" and coming down to the beautiful books of the publishers of the present day; library appliances, such as registers, card catalogues, and cases for the same.

The choicest and finest collections of apparatus for physical and chemical laboratories form a department in the exhibit. In a darkened chamber are given, by one thoroughly versed in his specialty, experiments in electricity of a brilliancy seldom seen.

The department of medical education contains anatomical models, skeletons, obstetrical instruments, chemical apparatus, and professional literature.

The Bureau exhibit is concluded with specimens of the handiwork of the pupils of reform schools, of the schools for the blind, and of schools for the feeble-minded.

The foregoing gives but the most general outline of the exhibit assigned to your committee. To attempt more than this would be to go far beyond the limits fixed for this report. One conclusion, your committee believe, may be readily drawn from this outline, and that is, that the functions of the Bureau should be greatly enlarged. The genius of our institutions remits,—wisely, perhaps,—the matter of public education to the several States; but this is no reason why sufficient power should not be lodged at the head of the nation to give intelligent direction to the efforts of these States. This end, it seems to your committee, can only be attained by enlarging the Bureau into a department of the government, and making its head a cabinet officer. That the educational interests of the country are of such importance as to warrant such a recognition ought not to be doubted by any intelligent citizen.

JOHN HANCOCK, *Committee.*

## REPORT ON INDUSTRIAL EDUCATION.

Industrial education, in its various kinds, has been well represented at the New Orleans Exposition, though many well-known technic schools of our country failed to contribute any reminder of their existence.

The element of hard work is made more or less prominent in (1) Charitable institutions for the blind, the deaf, and dumb, and the idiotic and feeble-minded. (2) The industrial homes of city missions, in which the poor and neglected are taught to do some kind of work with reference to rendering them useful and capable of earning their own living. (3) Reform schools. (4) Manual labor schools, in which students may pay their way by devoting a part of their time to productive industry. (5) Trade or apprenticeship schools, in which one or more branches are taught with direct reference to artisan life. (6) Mechanical schools, in which the instruction is more general, but the work is done for the market. (7) Manual training schools, in which hand-work forms part of a general education, and is considered as an indispensable aid in developing the complete man, no effort being made to give a commercial value to the shopwork.

Teaching the blind to make articles for use or ornament has become so much a matter of course that we have almost ceased to wonder how they can be made to see so well with their fingers. The products exhibited by the New York, Ohio, and Louisiana Institutions for the Blind showed that skill in some kinds of hand-work is attainable by those unfortunate ones. It is well worth the while to give them such manual instruction, even if their labor should serve only to keep their hands and minds busily occupied. For them, anything like real competition with seeing laborers is out of the question.

The New York, Illinois, Tennessee, and Mississippi Institutions for the Deaf and Dumb exhibited excellent specimens of work in various lines. Of course there is nothing to hinder deaf mutes from learning most branches, like other churches; only there is necessarily much more time consumed in acquiring the means of exchanging ideas, and so the rest of their education is much retarded. The teacher must treat them, not according to size or age, but according to their state of development. I have found them to take great interest in working with carpenters' tools, and to make very commend-

able progress. The mere handling of tools they readily learn by example; but the laying out of the work requires much explanation and training in self-help. It is not strange that they are somewhat deficient in self-reliance, and nothing can be better to strengthen them in this respect than a judicious course of manual training. I believe it would be of the highest advantage to those who lack the sense of hearing to introduce into their institutions the appliances and methods of our best manual training schools.

Of the few institutions for the feeble minded in our country, the school in Boston and the Kentucky Institute were represented by the work of their pupils. We cannot expect the articles to be remarkable for their intrinsic excellence; but, with the accompanying legends, they were of great interest as showing how, by the persevering study of each case of mental imbecility, some clue to improvement may be found, almost always. The mere glimmerings of intellect may find expression through the hands, and give delight to the possessor and hope to his friends.

In city mission efforts to help the poor by putting them in the way to help themselves, the industrial school has proved very efficient. Of these there were shown the work of the North End Mission, and some from the South End Industrial School, both of Boston, Mass. The North End Home, under the management of a lady of remarkable executive ability, has become a model institution. An old church building, in a crowded part of the city, has been bought and rearranged so as to give suitable rooms for a circulating library and reading room, a joiners' shop, a printing office, a shoe shop, a laundry, a kindergarten, a crēche, a kitchen garden, a cooking school, a sewing school for children, and a sewing room for older persons. While all are helped and taught here without money and without price, every one who can is expected to do some little toward the support of the home. The better part of the work done in the shops meets with a ready sale. And while the laundry contributes to the general cleanliness by affording a place in which the poor may do their washing, each one who makes use of its facilities is expected to do some laundry work for the mission. The children receive ordinary intellectual instruction in the public schools of the city, and the added industrial training which they have at the home exerts a most salutary, elevating influence, besides putting many directly in the way of obtaining good situations. The books of the carefully selected library are well read. The South End School is more limited in its scope, and its exhibit was smaller. But the printing, joiners' work, sewing, drawing, and design were very creditable. Similar to these

schools in its aims is the New York Workingman's School, which exhibited some work in modeling.

The reform schools, in which hard work enters as a very important element for real reform, were represented by the State Reform School of Portland, Me., the Wisconsin Industrial School for Girls, and the State Industrial School at Golden, Col. While it is important in such institutions not to allow any hands to be idle, regard should be paid chiefly to cultivating a love of work and the desire and ability to be useful. The hand-work should be planned and carried out so as to make it attractive and improving.

Though the manual labor schools of a former generation were failures, it does not follow that we should indiscriminately discourage all attempts to render students partly self-supporting during their course. In the schools for the colored races at Hampton, Va., and Carlisle, Pa., there is included the saving element of work for instruction as well as work for profit. Older efforts to civilize the Indian by training the intellect alone led to no permanent results. But when the arts as well as the sciences are taught, the matter assumes a new and most encouraging aspect. The exhibits proved that the Indians of the wilder tribes can readily learn the handicrafts of the white man; and, of course, they do not need to wait till they have learned his spoken language first. Through imitative hand-work they can begin at once to acquire regular habits of application.

For persons of African descent, in straitened circumstances, Hampton Institute is doing a good work, by affording them the means of getting an education where bodily labor is held in honor, and where intellectual cultivation is shown to be perfectly consistent with manual employment.

Of trade and apprenticeship schools, the only one represented, outside of the French exhibit, was the New York Trades' School, which showed a lot of plumbers' work well done. Of the few excellent mechanical schools in our country there was no representation at all.

The newer manual training schools of our own country, France, Sweden, and England were very well illustrated. The first to introduce the so-called Russian system into this country was the School of Mechanic Arts of the Massachusetts Institute of Technology. This school sent drawings and a single full suite of specimens of the shop-work done by students,—work in wood, iron, and brass. The Russian plan, originally adopted, was that of making elementary parts, such as a single dove-tailed box cover,—a mortise and tenon joint by itself,—and this course is still followed in some schools.

But in Boston, in the progress of evolution, the method has been modified so as to approach more nearly the Swedish system of making articles simple and complete in themselves, like a whole dovetailed box, or the different sorts of mortises and tenons combined in a model of a house frame. The former method somewhat resembled the old-fashioned way of learning to read by spelling detached syllables,—the a-b, abs. Of course, it takes more time to make four corners than to fit one; but it excites a greater interest on the part of the pupil, and the work tests itself when he tries "to make both ends meet." A good set of specimens was shown by the Colorado Agricultural College, and Minnesota University made a creditable contribution. Girard College, the Spring Garden Institute of Philadelphia, and the Baltimore High School exhibited a few samples of students' work, but they have not been carrying on manual training long enough to enable them to make a very full series of articles. In the Illinois Industrial University, hard work has been practiced to some extent for many years, and latterly has received a full development. Their exhibit was very full and good, and very well arranged. Tulane University, of New Orleans, which is just starting the manual training, and has no stock of manufactured articles to show, contributed its share by setting up a school in actual operation in the gallery of the government building. Pupils in regular attendance at the high school in the city went every day to the Exposition to receive lessons in carpentry and mechanical drawing. Thus the subject was made more striking, and the boys at work attracted the attention of passers-by, who would have failed to notice mere specimens of hand-work. It was a happy thought of the Commissioner of Education to arrange for such a practical illustration with the workers, tools, and appliances of the manual training school, as well as of the kindergarten and the kitchen garden, which were in actual operation every day in another corner of the gallery.

The remarkable slöjol work of Sweden was illustrated by a set of drawings of the Nääs models, with the explanatory "Hjelpreda vid Undervisningen i Träslöjd," and by about 100 specimens of very nice woodwork, made by boys from eleven to fifteen years old, in the schools of Stockholm. These articles were secured for the Exposition through the kind offices of Herr Salomon, the liberal-minded and zealous director of the Nääs Slöjolteachers Seminary. Sweden has made rapid progress in this new departure, and already numbers some 700 common schools, in which hand-work for boys forms a part of the instruction. The exhibit was a notable illustration of the possible, patient dexterity of pretty young school-boys.

The hand-work exhibited by the schools of Sheffield, England, though of the elementary character, was well done, and of good promise. It sufficed to show that the recent agitation of the subject in our mother-country has not been in vain, and that manual training has at length gained a footing there.

But with respect to the industrial training of both sexes, as well as intellectual education, the exhibit of France was most striking on account of its variety, completeness, and excellence. Arriving late, it was crowded into a space far too small for its most effective display ; but no one interested in education could pass through that section of the gallery without stopping again and again to examine some portions of this copious collection of educational appliances, products, and illustrations, and finding, every time, something new to admire. In the last three years France, which before was by no means in the rear in object teaching and shop-work instruction, has come by rapid strides to the front. Drawing and handwork are now introduced by law into the public schools of Paris, and manual training schools are multiplying in the other cities. The display of manufactured articles from the numerous schools indicated much natural aptness on the part of the pupils, and judicious guidance on the side of the instructors. In looking over the specimens, one would hardly believe that the new system had been put into operation so recently. The liberality of the French people, in appropriations for education and the evident determination to adopt fully whatever is good in the realistic movement of the day, speak and augur well for the Republic.

While boys have healthful practice in the use of tools for working wood and iron, the girls attend to dressmaking and needlework, occupations which do indeed accord with the more prevalent ideas of the proper sphere of women, but which hygienic considerations would condemn as increasing the already too great amount of sedentary, cramping work. In our own girls' schools the little that has been done in the way of manual cultivation is of the same narrowly limited, utilitarian character. Very creditable dressmaking was shown by the Winthrop School of Boston, the Philadelphia Normal School, and the Maryland State Normal School. We would by all means welcome drill in the use of needle, thimble, and scissors, and encourage its general introduction into the schools, for it will at least serve as the entering wedge for a more extended manual training by and by. An expected exhibit from the Boston Cooking School was not forthcoming, to show the delicious possibilities of the grid-iron, the saucepan, the dredging-box, and the rolling-pin. And the great Exposition, with all its instructive lessons, contributed very

little toward solving the great question, "What shall constitute an active, health-giving, multifarious, manual training for girls?" Already, in advanced education, we admit the gentle sex to chemical, physical, and horological laboratories, and give them the same apparatus that their brothers work with. And, surely, in the lower schools, from the progress made in contriving tool-work for boys, we may hope that there will yet be devised for girls some more robust hand-work instruction, which shall be perfectly compatible with womanly grace and refinement.

As industrial art is the ally or handmaid of the industrial arts, drawing and kindred branches come partly within the province of this report and require some mention. Here, again, we must give unstinted praise to France for widely spread and thorough instruction in drawing and modeling. These subjects are cultivated both as elements of general education and with special reference to industrial design. They are not made optional and exceptional, but are required of all advanced pupils in schools of both sexes, and they evidently have a quickening and elevating influence.

Among our own people too many still need to be convinced that these branches have higher, more general, and more important uses than to occupy and amuse *dilettanti*. And yet there are some encouraging beginnings of work in the right direction. Excellent exhibits were made by the Lowell School of Design in Boston, the Normal Art School of Boston, the Philadelphia School of Design for Women, and some schools not devoted exclusively to art. The Chicago schools and the Spring Garden Institute of Philadelphia deserve especial mention as showing evidences of rational and fruitful instruction in drawing. The large and full exhibit made by the Christian Brothers of their schools in various parts of the country prove that the art element is duly appreciated by this Order, which has done so much for education in France. The evening schools of Boston and Providence illustrated a class which have not yet extended much outside of New England. Such instruction, which Massachusetts provides in the large towns at the public expense, has justified itself by developing a talent and awakening an earnest purpose of improvement in many who are occupied during the day with earning a livelihood.

JOHN M. ORDWAY, *Committee.*

## REPORT ON THE EXHIBIT OF THE SCHOOLS AT THE CHRISTIAN BROTHERS.

Of the many thousands who visited the Educational Department of the Exposition at New Orleans, very few had ever heard of the "Christian Brothers;" and not one of these few was prepared to find under this title an exhibit so extensive, so varied, so systematic, so complete, so suggestive, so instructive.

"The Christian Brothers" is an order of the Roman Catholic Church, whose members devote themselves entirely to education. It originated about two hundred years ago with John Baptist de La Salle, of Rheims, a young priest of splendid talents and high social position; but, withal, "a genuine man of faith and charity." In 1680 he had around him the nucleus of the new brotherhood, but the Brothers were poor and La Salle was rich, and when famine arose in the land the poor Brothers began to distrust the rich Abbé. La Salle sold all that he had, — and he had "great possessions," — and gave it to the poor; and with his "treasure in heaven," he said to his companions: "Henceforth our reliance is on Providence." In a few years he had built schools in the dioceses of Rheims, Paris, Rouen, Avignon, Chartres, Laon, Troyes, St. Omer, Boulogne, Alais, Grenoble, Meude, Marseilles, Langre, Usez, and Autien.

La Salle seems to have anticipated many educational ideas, which are popularly regarded as the product of modern thought. Exact gradations, simultaneous rehearsals, object lessons, normal schools, polytechnic schools, industrial schools, reformatory schools, all had a place in his inventive and capacious mind; and all were realized by his constructive genius. Unlike some school reformers of the present day, he did not limit himself to destructive criticism. His mission was to build, and he laid his foundation so deep and broad and firm that, after many storms and sieges, after some alterations and additions, it is still a noble, commanding, and symmetrical structure.

In 1683 he established a seminary for young teachers at Rethel, and another at Paris two years later. He opened a boarding-school at St. Yon, for the education of the sons of the gentry, and, under his comprehensive direction it became, in reality, a polytechnic school, embracing in its curriculum "history, physical geography, literature, rhetoric, the science of accounts, geometry, architecture, natural history, hydrography, mechanics, differential and integral calculus, and cosmography;" and this at a time when the best schools in England taught nothing but Latin and Greek.

Under La Salle's direction the "School of Discipline" was opened at Rouen, for the reformation of young men of the higher classes.

"Thus it is evident," says M. Rendu, "that the illustrious founder of the Christian schools was the pioneer of popular Christian education, not only in France, but in Europe. With one master-stroke he founded seminaries for country teachers, normal institutes for city masters, boarding-schools wherein commerce, finance, military engineering, architecture, and mathematics were taught."

The educational exhibit of the Christian Brothers at New Orleans was so extensive that any detailed account of it, within the limits of this report, is impossible. A month of study and an octavo volume could hardly do justice to it. It contained specimens from two normal schools, four colleges, twelve academies, thirty-seven parochial schools, two industrial and training schools, and two orphanages. The normal schools represented are those at Amawalk, N. Y., and Ammendale, Md. Among their exhibits were found historical and literary treatises by members of the order, several series of text-books, models in wood, zinc, and pasteboard, and a very large number of plaster casts for the teaching of drawing. Among the colleges may be named Manhattan College, N. Y.; Rock Hill College, Md.; De La Salle College, Philadelphia; Christian Brothers' College, St. Louis; and Christian Brothers' College, Memphis. De La Salle Institute had the largest exhibit of any of the academies. The papers in languages and mathematics are especially commendable. Much good work was also sent by the Sacred Heart Academy, Westchester, N. Y.; St. Joseph's Academy, Baltimore, Md.; St. Mary's Academy, Troy, N. Y.; and Manhattan Academy, New York City.

Among the thirty-seven parochial schools represented may be mentioned with distinction, on account of the quality as well as the quantity of work exhibited, the Cathedral School, New York City; St. James' School, Brooklyn, N. Y.; St. Peter's School, Philadelphia; Cathedral School, St. Paul, Minn.; St. Peter's School, Baltimore; and Cathedral School, Philadelphia.

The New York Catholic Protectory at Westchester, N. Y., sent a wonderful collection from its factories and shops, as well as from its schools in the male department; shoes, clothing, books, chairs, stockings, besides maps, drawing, and class-work; in the female department plain and fancy sewing, lace-work, embroidery, and gloves. The brief examination of this vast exhibit, which alone was possible to the writer, suggested the following thoughts:

1. Its *completeness*. Nothing was left out that was at all capable of being presented to the eye: copy-books, note-books, manuscript,

lesson-books, exercise books, summaries of lectures, maps, charts examination papers, freehand pencil drawings, mechanical drawings, architectural drawings, projections, studies from nature in crayon and in water-colors, plain sewing, fancy needle-work, embroidery, apparatus for teaching, mathematical models, anatomical models; all were there.

2. Its *systematic arrangement*. It was easy to trace the progress of a pupil from the elementary to the highest grade in every subject, and to observe, not only the results, but, to some extent, the means by which the results were obtained. A study of the work, in the order in which it was presented, was a study of the system under which it was executed.

3. Its *excellence*. One cannot speak of comparative excellence without knowing more than can easily be ascertained of the exact circumstances under which the work was done. Not merely the age and the grade of the pupil must be taken into account, but the character and extent of previous preparations, the amount of assistance and direction given, the time occupied in the work, the amount of revision and correction, and other facts well known to practical educators. But, speaking absolutely, all the work was good, and some of it remarkably good.

A word or two respecting the causes which have produced these excellent results may not be out of place.

1. The existence of a single will; a single superintending, directing, energizing force. If La Salle himself were at the head of the system in person, as he is in spirit, he could not infuse into it a greater measure of unity, in design and uniformity of execution.

2. The persistence of this force. A child once placed under the care of the Brotherhood for his complete education, remains under precisely similar influences during all his school life. There are no contrary winds and currents to retard his ship. From port to port he is wafted by the genial and uniform trade-winds blowing ever in the same direction.

3. The system admits of adaptation to the special wants of individual pupils. This is one of the causes of the success of the Jesuit schools of the preceding century. The individual was not neglected for the mass. Wherever special talent was discovered, it was fostered, encouraged, developed; where special weaknesses were found to exist, the proper remedies were applied. The purpose was not to turn out a large number of coins from the mint, under precisely the same pressure, and with exactly the same inscription and ornamentation, but rather to study the nature of each separate piece of metal,

and to subject it to such pressure and leave upon it such an impress as would best suit its character.

4. The Brothers are devoted exclusively to the work of education as the sole business of their lives. This absolute consecration to a single aim, which, in other spheres, sometimes degenerates into fanaticism, seems with them to produce only an enthusiasm which at once increases and lightens their labors, giving the power to work while it stimulates to action.

5. The Brothers are alive to every change in the popular phase of education. While they hold on to nothing merely because it has the sanction of antiquity, they are ready to try every novelty, and to adopt it if it stands the test of experience. La Salle himself could not have been at the same time more conservative, more observant, and more originative than his successors.

6. Whether the connection of the "Christian Brothers" with the church is a favoring or a disturbing element, this is not the place to inquire; but investigators must always take this factor into account. The school is taking a more important place in the machinery of the church than it has occupied in it for several centuries past. The result will be watched with interest.

M. A. NEWELL, *Committee.*

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## REPORT UPON THE EDUCATIONAL EXHIBIT OF THE COLORED PEOPLE.

The impressions made were very favorable. Here was to be seen the educational efforts of a recently liberated race of people; out of the bondage of darkness they have, by almost superhuman industry, passed into the freedom of light.

In the short space of twenty years we see established and liberally maintained, both by State and individual, a complete system of free education, from the kindergarten to the university. In the kindergarten department were seen a number of colored children, happy and industrious, evincing much aptitude for the work before them; busy fingers, eyes, and ears, indicated that they were ready pupils The results of this department were satisfactory, and clearly demonstrated the wonderful ability of the rising generation of colored people to become useful, valuable, and honorable citizens.

The general exhibit of school-work was large and satisfactory. Thirteen States—viz., Ohio, Indiana, New Jersey, Virginia, Tennessee. Kentucky, North Carolina, South Carolina, Alabama, Arkansas, Louisiana, New York and Michigan,—also, Washington, D. C., made exhibits, either from the common schools or institutions of a private, endowed, or parochial nature. Seven of the Southern States were represented, thus showing the spirit of progress of the colored people, and the spirit of friendliness of the whites. The possibility of the development of the intellect of the colored race is placed beyond dispute by the evidence of their ability through their educational exhibit. This evidence of their ability to rapidly improve the mental and moral condition clearly defines the importance of placing in the hands of this people greater opportunities to remove, by their own efforts, much of the uneasiness felt for them and for the country, on account of the still existing incubus of illiteracy. In every grade and subject, marked ability was apparent. Penmanship was good, setting forth clearly the power, imitation, and control over the nervous system. Drawings, class and individual work, showed talent, and much of the work was interesting, and attracted general attention.

The manuscripts examined were evidence of faithful application and much good teaching. Occasionally the need of better instruction was very discernable. Here it may be stated, that the existing evil is slowly but surely being corrected. Year after year better prepared colored men and women are leaving the many valuable institutions of higher learning that are rapidly growing up all over our country, and especially in the South; and these better prepared colored men and women are taking the places of those who have been trying to do a work they were so ill-prepared to do; thus the future of the colored child is growing brighter. Old prejudices are passing away, a new era is dawning. Through this great, bold, and noble effort of the colored people to stand side by side with their former masters, they have been able, in this great exposition, to demonstrate their wish, their desire, their ambition, and their ability to get up higher. Down in the slum of ignorance, vice, and crime they will not remain, but in the bright light of a new-born day they are going to live, and God grant them speed in their noble resolve.

The many noble institutions for higher education are well represented. Normal schools, theology, law, medicine, and industrial schools, in all departments, are proofs in various forms of good work being done. The following named schools make exhibits:

Virginia—Richmond Normal School, Richmond.

Tennessee—Tennessee Central College, Nashville.

Kentucky—State University, Normal and Geographical Institute, Louisville

North Carolina—Biddle University, Charlotte.

South Carolina—Schofield School, Aiken; Morris Street School, Charleston.

Alabama—Cuba Street School, Mobile; Tuskegee Normal School, Tuskegee.

Arkansas—Union High School, Arsenal School, and Public High School, Little Rock.

Ohio—Wilberforce University, Xenia; Public Schools of Galipolis.

Washington, D. C.—Sumner School, Jno. F. Cook School, Lincoln School, Stephens School, Anthony Bowan School, Chamberlain School, Muren School.

Indiana—Governor Street School, Evansville; Independence School, Evansville; Clark Street School, Indianapolis; Public Schools Nos. 19 and 24, Indianapolis.

New Jersey—Mount Vernon School, Camden.

New York—Public School, Kindergarten, Sygarueth; School No. 1, Brooklyn.

Michigan—Mason High School, Mason.

Louisiana—Leland University; Straight University; Southern University; Public Schools; Kitchen and Kindergarten, New Orleans; Parish schools from over the State.

As has been stated, the State and the individual have fully realized the importance, value, and necessity of the education of the colored race, and have happily united in sentiment and activity in developing greater opportunities for the better education of this people. Too much praise cannot be bestowed upon the colored people for the satisfactory display they have made in their first exhibit. It certainly contained a sufficient amount of work to show their advancement, ambition, and the increasing interest they are taking in the education of themselves, which is the only agent that can solve the many isturbing questions of the day.

WARREN EASTON, *President.*

## THE EXHIBIT OF WOMEN'S WORK.

In any attempt to estimate the quantity, variety, and value of the work of the women of the United States from the exhibit of women's work at the International Exposition lately closed at New Orleans, it is necessary to bear in mind many facts and circumstances which combine to make a completely representative display of women's work impossible, and to render an even remotely indicative display difficult.

First: A very large majority of women still spend all of their time, strength, and skill in house-keeping and child-rearing; and the products of such labor, although of fundamental and final importance, are not of a kind that can be collected, classified, labeled, and set forth in show-cases. Second: Of the minority of women who pursue, outside of home, an independent calling, by far the larger number work as subordinates, and, although one found the work of their hands exposed at New Orleans, it was entered in the name of the manufacturer, machinist, miner, or merchant in whose employ the work had been done. Third: Concerning that minority of the minority who own their business, who are at the head of their own affairs in whatever trade, art, or profession engaged, a few simple facts must be considered. Some expense is always incident to the display of one's work; and, although this expense was by the provisions of the Exposition management reduced to a minimum, it remained a relatively greater obstacle to women than to men. This is not because working women are deficient in enterprise, but because the business ventures of women, even in the older States, are relatively recent. Compared to the whole number of women conducting an independent business in this country, the number of those that have been so engaged long enough to have large exhibitable results, and to have surplus means warranting the expenditure incident to exhibiting, is very small.

According to the United States census of 1880 the number of our women then engaged in registered occupations was 2,647,157, and the number of occupations among which these were distributed was 218. The work done and being done by these millions of women in these hundreds of occupations was suggested rather than shown at New Orleans; more forcibly suggested, perhaps, in the displays in the main building and in the State exhibits than by those in the

Women's Department. In the former, one found only the serious work of women side by side with the serious work of men; in the latter, one found the products of amateurs rather than of professionals, the fruit of woman's leisure rather than of her toil; or, more justly, one found here the fruit of her leisure side by side with the fruit of her toil, and preponderating over it.

That a report of women's work in the great Exposition is brought before American teachers is a pleasing recognition of the part women are taking in developing the resources of the Commonwealth; and the unquestionable propriety of presenting such report before the National Educational Association is emphasized by two considerations: first, in the industrial progress of women the public school is an important, if unconscious, factor; second, some defects in the education of women and some weaknesses in the public school are suggested in the recent display of women's work. The public school has been the great equalizer of the sexes; girls who have stood shoulder to shoulder with boys in study unconsciously grow into women, who expect to stand shoulder to shoulder with men in the application of the knowledge gained from their common study to those industries and arts which shall sustain their common life and improve its conditions.

The first factories of America were in the kitchens and chambers of homes where the spinning, dyeing, weaving, tailoring, millinery work, boot and shoe making, etc., etc., were wholly or mainly done. When, therefore, factories were eliminated from dwelling-houses and consolidated, women soon re-entered them; but having lost individual proprietorship, they usually resumed manufacturing as subordinates.

The number of women registered by the census of 1880 in "manufacturing and mechanical industries" was 631,909. The marvelous displays made by the Conant, the Willimantic, the American, and the Arkwright mills; by the Waltham, the Elgin, and the Gorham factories; by the firms of John Clark, Jr., & Co., Cheney Brothers, Tiffany, and a score of others, while representing the enterprise, generalship, executive force, and inventive genius of men, represented the actual work of as many women as men,—in many instances, of more. Even a limited knowledge of the laws of mechanics, some discipline of the eye and hand, and a slightly better physical development (all of which should be provided by the public school), would greatly advance the value of women in manufactures, and would lift many of them out of the drudgery of the factory into directive positions.

The last census assigned 594,510 women to agriculture. A much larger proportion of the women in agriculture are owners and proprietors than of the women in manufactories. The agricultural exhibits entered in the names of women were proportionately numerous, and held many surprises for the observer. In the State exhibits of Nebraska, Dakota, Minnesota, Iowa, California, Colorado, Florida, Mississippi, Louisiana, Tennessee, and New Hampshire were very notable entries by women. No finer cereals; no sweeter, better grown, better cured hay, grass, and clover.; no larger vegetables; no more tempting fruits; no whiter, cleaner cotton; no longer wools; no finer mohairs were to be seen than those from the farms, plantations, and ranches owned, superintended, and, in some cases, exclusively worked by women. From Pennsylvania, California, Florida, and North Carolina were sent the results of women's experiments in silk culture. Exhibits showing every stage in the process, from the egg to the exquisite fabric, were made. Silk culture has been attempted in most of the States with a success which warrants the belief that it will ultimately rank among the productive interests of our country. Some entries in the California exhibit were so significant that they demand particular mention Some jars of honey and samples of mohair, shown by Mrs. J. C. Pleasants, are the products of her two-fold labor. This lady has an apiary of 200 colonies of bees, which yield an annual profit of $2,000, and a herd of 500 Angora goats whose fleeces add $1,800 to her net income. Boxes of delicious raisins, from the vineyards of Miss Austin and Mrs. Blower; peerless oranges from the groves owned and superintended by Mrs. Kimball; and a beautiful display of 100 varieties of fruit, canned by Mrs. Cook as samples of the products of her large fruit farm, had an interest beyond their beauty, palatableness, and feminine ownership. Mrs. Pleasant's success as bee and goat raiser, and that of the other ladies as fruit-growers, together with the efforts made by them all to disseminate information concerning these industries among the women of their section, have greatly stimulated activity in these occupations; and now the women named are representatives of a large class, who, as farmers and raisers of bees, goats, sheep, and fruits, contribute much to the wealth of the Pacific States, and command the interest of statisticians and political economists.

The number of patents on articles invented by women registered at New Orleans was, as nearly as could be ascertained by very careful observation and inquiry, nearly one hundred.

One who would attempt an induction from this number must note certain facts: First, an article, or improvement on an existing article,

having been invented, and the model made, an indefinite outlay of time and money, applications and examinations frequently involving a journey to Washington, and much anxiety, are the conditions upon which a patent is secured; second, women still are rather ashamed than proud of inventive power and mechanical skill. As English noblemen in manufactures and trade are still inclined to conceal these vulgar interests, and to be silent partners in business which has been thought alien to their rank, so American women, whom taste, talent, or necessity has driven to invention, sell their inventions. One who has made even superficial inquiry must know that not unfrequently patents are issued to men upon inventions made by women.

Deducting the number of domestic servants from the number of women registered, in 1880, in "Personal and Professional Services," we find 422,385 women distributed among the professions and other occupations not included under agriculture, trade and transportation, manufacturing, mechanical, and mining industries. In this number are women following scientific pursuits. One's ideas of women's activity in science were much enlarged by a careful survey of the Exposition. Several State exhibits contained classified lists of native animals and plants prepared by women. In some instances the lists were illustrated by herbariums and by cases of animals, birds, insects, and fishes, indicative of woman's scientific attainments and of her skill in taxidermy. The Pacific Slope division of the woman's department was rich in botanical exhibits. These included very complete collections of Pacific Coast ferns, by Miss Babson; marine cryptogams, by Mrs. Feeley; and California lichens and mosses. All of these were scientifically named and described. The name of Professor Lemmon on the labels (bearing his wife's name also) must not prevent Mrs. Lemmon's work from being mentioned. Their herbariums are a revelation of the rich flora of California, and their discoveries, with the scientific accuracy of their descriptions, have enriched American botany. Kentucky showed prepared drugs and medicines from her School of Pharmacy for Women. The woman's scientific department exhibited many applications of chemistry to domestic science. Here were samples of food tested to show adulterations; samples of silk tested to reveal foreign fibre; here was "The Housekeeper's Laboratory," (a box, devised by Mrs. Richards, of Boston, containing phials of chemicals, measuring-glasses, and directions for numerous tests desirable in household economy). Most of the science exhibits, excepting in pharmacy, botany, and zoölogy, were entered by New England women.

By extending scientific courses in high schools, and encouraging

girls to enter them; by declining to consider work in languages as a substitute for work in science; by giving in connection with, or supplementary to the regular course, some acquaintance with common tools, with implements and apparatus; by exerting their influence for the opening of agricultural and scientific schools to girls, the public school leaders might stimulate in young women, scientific tastes and mechanical invention. As it has been shown that such knowledge and invention are immediately applied by women to the improvement of the home, the most obvious reason exists for men and women equally to exert themselves in this matter.

In art, the best work shown by women was in the decorative and illustrative orders. The New York, Philadelphia, and Cincinnati schools of technical design, the art department of Spring Garden Institute, the Cincinnati Pottery Company, and scores of less famous institutions, were represented by the work of women students. These exhibits included studies from nature, followed by conventional designs for carpets, wall-papers, friezes, tapestries, tiles, stained glass, etc., accompanied in many cases by fabrics in which these designs had been reproduced; elegant examples of wood-carving, potteries, decorated china, moldings, artistic embroideries, and hammered metals. The number, size, and variety of these displays indicate that the furnishing and interior decoration of dwellings will soon be in the hands of women. Collections of the original designs made by women for illustrations, cards, and calendars were sent in quantities by Scribner, Harper, Prang, and other publishers. In some cases these were accompanied by the original drawings, and the engravings, or chromos, the pictures in their latest as well as in their earliest phases, being women's work. Inquiry shows that the best and most abundant work of the kinds above indicated was sent from the cities in whose public schools most attention is given to drawing, mechanical and free-hand. It must not be overlooked that those cities abound with other incentives to artistic activity and afford other means of art instruction; still there remains an inference which should stimulate elementary art-instruction in the public schools. The work of women in education, as shown at New Orleans, need not be reported to this assembly.

In conclusion, attention is called to a division of women's work, which can be but partially suggested in any exhibit. The photographs of the institutions consecrated to benevolent uses, built, supported, and managed by women, were counted by the hundreds in the State exhibits and in the alcoves of the Woman's Department. Many scores of pamphlets containing the history of these institu-

tions, setting forth their objects, and reporting their methods and their results, were collected there. The observer of these unobtrusive witnesses to work and to aspiration, however great his prior intelligence upon this subject, must have obtained at the Exposition a new and enlarged conception of the time, talent, energy, and devotion given the women of this country to practical philanthropy. That the public school contributes not only to fit woman for, but to spur them to, this work is evident to any thoughtful mind. Here rich and poor, fortunate and unfortunate, meet and grow up together ; mutual interest, mutual attachments facilitate mutual helpfulness in mature years ; relations are here established which will give the destined helpers an acquaintance with and a feeling for the helped which could hardly otherwise be attained. Through their spontaneous but organized and intelligent benevolence, through the reformatories, asylums, and special schools which they found and maintain, do women repay the State for the education and the opportunities which they receive through its public schools. The writer of this report does not believe that the public school should be turned into a shop, or that tuition therein should become an apprenticeship to a bread-winning trade ; but she does believe that officials and teachers might and should, through the school, counteract for students of both sexes the weaknesses induced in each by home habit, social customs, and tendency. Intelligent and concerted effort should be instituted to make the public school a greater means of literary culture to boys than it now is, and a more powerful aid to girls for attaining such knowledge as will assist them in the common arts and industries of life.

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## REPORT ON THE EDUCATIONAL EFFECTS OF THE WORLD'S EXPOSITION AT NEW ORLEANS ON THE SOUTH.

The "Committee of Fifty," representing the National Educational Association in the International Convention of Educators, held in connection with the World's Exposition, at New Orleans, in February, 1885, assigned to the writer of these pages the important duty of making a report to the national body concerning "The Educational Effects of the Exposition on the South." As if the limitation of this report to "two thousand words" were not enough of discourage-

for that slow, cautious, experimental work of laying the foundations of free society which can alone assure the permanency of republican institutions in any country and for any race. This has been largely a work of politics, carried forward through the fierce conflicts of five presidential campaigns, always obscured by violent partizanship in both sections, and only to-day seen in its true outlines by the most thoughtful and catholic public sentiment of the whole country.

But all this was only clearing the ground of the ruins of the past, and anticipating the dangers of the future, that the field might be open for laying the deep foundations of the New South in the opinions, habits, and common life of the whole people. The two foundation stones of the new southern life were *Free Skilled Labor* and *Universal Education.*

All labor, in our country, is virtually servile, as long as it is only muscular, unskilled, moving on the lines of drudgery. Such a man, by whatever name he may be called, must be a man in a corner, chained to menial toil, always behind in the race for success. The fact that he wields a vote only fills him with a blind indignation against the whole goings-on of the new world of skilled industry, whore operations to him are as unaccountable as the tumult of the elements or the capricious government of the heathen gods. While the North is yet but half emancipated from the slavery of unskilled labor, the South found itself, twenty years ago, completely in the power of a laboring class almost wholly unable to use machinery, or to work in the modern skilled way on any of the great lines of industrial development. Along with this ran neck-and-neck the appalling illiteracy of the great majority of its laboring class,—in some of the States nearly a third of the white, and in all two-thirds of the colored people, being destitute of the elements of knowledge. It was evident to every thoughtful man that here was the vital point in the Southern problem. Only by a vast system of Universal Education, which should lift the laboring masses to that state of mental activity, moral soundness, and general intelligence, which would enable them to work in the modern way, by putting the brain into the hand, and bringing the marvelous powers of labor-saving machinery into play, could a country so vast, so rich in resources, and so undeveloped, be brought in line with the great movement of modern American life.

The South of the past twenty years has been working at this problem amid trials, embarrassments, and discouragements such as no Northern community can understand, and which the broadest-

ment, your "committee of fifty" has assigned this difficult and delicate office to a Northern man, only known to the Southern people by his labors, during the past five years, in an humble "ministry of education," through fifteen Southern States. The only condition on which this trust is accepted is the feeling that such a mark of confidence, bestowed by the full consent of the members of the committee from this section, comes to the writer with the force of a command.

The ruling population of our sixteen Southern States is of Anglo-Saxon descent to a far greater degree, at present, than of any other portion of the Union. Here, therefore, must we look for the most characteristic display of the Anglo-Saxon method of building free institutions, under difficulties that would appall any other people in Christendom. It is only twenty, practically only fifteen, years since the ruling race of these States has set itself, in earnest, to the gigantic work of rebuilding its civilization on the broad and permanent foundations of free American republican society. To accomplish this two things were absolutely necessary: first, that the white people of the South should clear themselves from the overwhelming wreck of a great civil war in the past, and secure themselves against the danger of a social and civil conflict, at home, in the future. This was done in the decisive way in which such things have always been accomplished by an Anglo-Saxon people. An Anglo-Saxon people drops a thing as soon as it is proved to be impossible; makes no investment in sackcloth and ashes, and wastes no precious time in mourning over the past, but seizes the vital point of the situation, adjusts itself to the present, and faces the future. When the Confederacy went down, in defeat, the Southern people understood that the Union was an established fact, and not even a squad of armed men, for the last twenty years, has raised the flag of rebellion against the authority of the national government.

But the first spectacle that confronted this people, looking into the future, was the awful peril of social and civil anarchy at home. Never before, outside the realm of poetry and fiction, was the attempt seriously made to govern a powerful, intelligent people, trained under republican institutions, by the votes of a numerical majority of freedmen, of another race, in an almost complete state of ignorance of the very elements of knowledge. In five years this danger was disposed of, and, if the method was sometimes open to serious question, the verdict remains with history for adjudication. Enough to say that, eight years ago, every Southern State had cleared the ground

minded and most kindly outside observer can only appreciate after long observation, and by an effort of the imagination which few men are able, even if disposed, to make. It is still the misfortune of our Southern people that this radical work of inaugurating free skilled labor, through universal education, is still almost hidden to the masses of the North by the political press, which hangs, like a drop-curtain, before the mightiest work of building free society now going on in Christendom. At the same time progress is hindered, at home, by the inertia of the ignorant class; by a considerable party who do not realize the problem at all, and by abortive efforts to evade the difficulty.

There are those who believe it possible to establish a great laboring class in the South resembling the old ignorant peasantry of Europe; forgetting that there is now no "contented peasantry" in Christendom,—that this class, in every nation, is, to-day, a volcano threatening society itself, and is as impossible, in our country, as an order of society founded on the Arabian Night's Entertainments. Another plan is to overwhelm this mass of ignorant labor, ten million strong, by a great tide of immigration from abroad and from the North. But ignorant foreign immigration would only aggravate the evil, and introduce new elements of discord. Intelligent immigration follows its own lines, and avoids countries already preoccupied by ignorant labor. While this expedient may be a success for certain unoccupied regions, it has failed almost utterly to meet the difficulty, while the South itself is losing thousands of its intelligent young men by the movement to the new northwest.

Yet, in the face of this wholesale misapprehension from the North, against great odds at home, the Southern people, of both races, have faced the sunrise, and to-day, in every State, stand fully committed to the new order of affairs. Every Southern State, in good faith, has established universal education of the American type, and, as things go, in this unsatisfactory world, is supporting it about as well as can be expected. No people in Christendom has done so much in fifteen years, under such disabilities, in establishing the free school for all people as our sixteen Southern States. And the result of this is seen in such a forward movement of free, intelligent labor, and such development of their country, through the combined efforts of home enterprise and outside capital, as must command the admiration of every competent observer.

Just at this point comes in, almost as a providential factor, the influence of the World's Exposition in New Orleans on this most vital

movement of the Southern people. When all has been said in disparagement of the superficial failures of this great undertaking, these facts remain :

*First :* The very inception of such an exposition is an evidence, not only of the genius of its leading spirit, but of the people who give it countenance. In the most sensitive State of the South, hundreds of miles from the crowded populations of the North, in a city with few facilities for making it a success, has been built up an exposition of American life in some respects surpassing any former achievement on this continent. Not only have the ordinary industries and resources of the country been fairly shown, but, in addition, the three most vital movements in the South, — popular education, the recognition of the colored people, and the industrial movement of woman, — have been better represented than ever before in our country. This fact alone has vast significance, showing the courage, temper, and tendency of the superior civilization of the South as in a gigantic object-lesson.

*Second:* In the display of all the methods and instrumentalities of skilled labor the Exposition has been a great university to the Southern people. The most ignorant man could not fail to feel himself in a new wonder-world, in the presence of this mighty spectacle of the powers of nature, in harness, for the service of mankind. In many departments the whole story of industrial progress was told by a display of the old and new methods of labor in a startling way. The industrial capabilities of the colored people, the marvelous achievements of woman's work, the overwhelming revelation of the industries of the great northwest, — all have combined to send an electric shock to the drowsiest corner of the South-land. As the writer of this report has traveled through the country during the past few months, he has seen the great awakening of thought and purpose among the returned visitors to the Exposition. The coming five years will bear testimony to the greatness of the change wrought by this astonishing exhibit of the New Industry.

*Third:* Only less important has been the effect of the exhibit of school-work on the teachers, school authorities, and young people of the South. Thousands of these classes have visited the Exposition. Indeed, the whole body of superior teachers in these States has been put in possession of that portion of the exhibit. The International Convention and the numerous local meetings of Southern teachers and visitations of schools and colleges have given to the forward movement, especially of popular education, a decided impetus.

Louisiana is putting forth new efforts, and every Southern State comes back from looking at the educational display with new determination and brighter hope.

One of the greatest benefits the South will reap from this winter's exhibit at New Orleans is the better understanding and appreciation of herself by her numerous visitors from the North. The visitors have been chiefly from the cultivated and influential classes of the Northern people, and they have returned with a new conception, not only of the physical resources of the South, but of what the corresponding classes of her people are doing on all the great lines of American progress. The North to-day can learn from the acquaintance with the foremost people of the South, lessons of courage, sacrifice, persistence, and hope of which the value cannot be told. The man who can really understand what this portion of the Southern people has done, and is now doing for itself, and for the nation, and turn away cold, unappreciative, or contemptuous, is unworthy of a name and a place in the United States of America. It only remains for the foremost people of the North to strike hands with their brethren of the South, give the aid and comfort that comes from hearty sympathy and appreciation, with such furtherance as may be practical and wise in every good enterprise, to hasten forward the upbuilding of this land of the future. And especially should this National Association of school-men and women, next winter, make another journey southward perhaps to Charleston, once more to shake hands and give and take the welcome of kindred souls. And once more should the whole body of American teachers call aloud on Congress and President to enact a law for national aid to education.

A. D. MAYO.

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## REPORT ON THE FOREIGN EDUCATIONAL EXHIBITS.

It was a pleasure to see the pains taken by the peoples of the tropical countries near us to show the products of their soils and mills. They did not omit the evidences of education and culture. Mexico sent very fine specimens of bound books; but Jamaica sent a very full and well-selected set of specimens, including scholars' work in copy-books, dictation, and arithmetic, from sixteen schools; maps, specimens of sewing, samples of fancy work, school reports, official documents, and other material. The writing-books were of special interest.

Japan made a magnificent display, whose more noticeable items were sets of apparatus for illustration of natural philosophy, constructed by pupils of a normal school, There were specimens of embroidery; drawings (made according to English as well as native methods); specimens of work from the kindergartens, showing the cutting and pasting processes; also wooden blocks covered with Japanese writing. There were text-books of all kinds, — many of them Japanese translations from well-known English and American works. Among the latter we noted Wickersham's *School Economy*, in 9 volumes; Calkins's *Primary Object-Lessons*, in 2 volumes; Page's *Theory and Practice of Teaching*, and others. There were botanic specimens and a cabinet of ancient and modern Japanese musical instruments. The pictorial illustrations of the ancient game of Dakiu on horseback, and its modern form as a school-game for boys on foot, were of the highest interest to the student of national customs.

It was France, however, that contributed the wonder of educational collections to the New Orleans Exposition. It was worth a journey from any part of the United States to New Orleans to see the French educational display, — at least it was worth so much for teachers. The genius of the French, wide-reaching as it is, is especially manifest in that very quality for which the entire New Orleans Exposition will be distinguished in history. We refer to the art of arranging and disposing things so as to make them display themselves. One can say truly that the apparatus of the French exhibit actually converts things into teachers. Let all schools be supplied with sets of this apparatus, and the pupils will learn to know the world of things without the need of explanation from human teachers.

We looked inquiringly at the exhibit of French text-books in reading to see what devices had been invented to compensate for this tremendous development of object-teaching, but were not able to find them. The text-books on reading proved for the most part to be connected descriptions of the world of things, and written each by one author, so that they did not furnish that variety of style which the reading-books in American schools secure by selecting the gems of literature from the great authors of the language. Our school children find in the study of poetry and lofty prose the necessary training in the humanities,—a training in insight into the human nature, and an acquaintance with the ideals of aspiration and noble, human striving. With these we balance, in some measure, our national tendency toward material wealth.

There were some books of French classic selections, designed, we

were told, by the courteous French commissioner, M. Buisson, for memorizing by school children To these text-books, we think, the French teachers turn for the most important matter of instruction. Each school is left free, we are assured, to select its own text-books.

W. T. HARRIS.

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## THE KINDERGARTEN EXHIBIT.

My time for examining the kindergarten exhibits at New Orleans was quite limited. I am, therefore, unable to furnish you a complete report of all, nor, indeed, a detailed report even of the most prominent exhibits; but must confine myself to a statement of general tendencies for good and for evil that were manifest, and to a somewhat detailed outline of a few of the typical exhibits.

One of the most notable facts, appearing in nearly all the primary school exhibits at New Orleans, was the evident desire on the part of teachers to utilize kindergarten material in their work. In the primary-school exhibits of the different States congregated on the gallery, as well as in those that had lost their way into the general State exhibits on the main floor of the Government Building, the weaving-mat and folding-paper, embroidery and parquetry, the shoe-peg and the tooth-pick gave evidence of this tendency.

In the majority of cases, however, the random character of the work indicated that the schools failed to appreciate the meaning and value of the material. It seemed that it was used mainly in the way of playthings, for purposes of so-called "busy-work." Only in a few cases that came under my notice, — notably in the exhibits of Clinton, Ia., Grand Rapids, Mich., and La Porte, Ind.,—there appeared an organic connection between the manual work with kindergarten material and the ordinary school-work, and a systematic use of the material for legitimate school purposes.[1]

Another encouraging fact stood out prominently in the influence of kindergarten work on drawing in the schools. It was evident in all the noteworthy exhibits of drawing that elementary drawing has come to rest chiefly on geometrical considerations; that, more and more, it is the aim to lead the learner to a thoughtful analysis of cer-

[1] An extensive exhibit from Newark, N. J., which had been placed under the care of the Bureau of Education, was still in so chaotic a condition that it was impossible to obtain an idea of its merits.

tain simple figures,—such as the square, the equilateral triangle, and the circle,—and to teach him familiarity with the elements obtained in simple synthetic efforts of geometrical ornamentation and design. In some of these exhibits there were unmistakable proofs of the growing conviction that the child should be taught to represent objects, surfaces, and even designs in clay, wood, paper, card-board, and other materials borrowed from the kindergarten, before it can be called upon to represent their outline on the ordinary drawing surfaces.

On the other hand I was unpleasantly moved by many evidences,—more particularly in some exhibits of private schools,—of a tendency to use kindergarten work for mere purposes of show. Children, from 9 to 11 years old, show with weaving patterns that had no merit beyond that of gaudy colors, with embroidered cards in which nothing was their's except the stitching, or with shameless, catch-eye embossings of scrap-book pictures.

Kindergarten work has no place in the primary school as a mere make-shift "to keep the children busy," nor as an expedient of make-believe success. All vague, aimless, or merely showy work of this kind is reprehensible. Whatever of kindergarten work is put in the primary school should go in as a help for legitimate school purposes, or not at all. Whatever is done should be done systematically, and should help the child better than ordinary school expedients to enter thoroughly into a living understanding and mastership of form, color, number, size, physical and chemical properties, of language, music, and drawing, of whatever is grouped in the studies of geography, history, science, and other branches of school-work. In other words, whatever of kindergarten work goes into the school should strengthen, intensify, vivify school instruction; not dilute, soften, or benumb it, as is so often the case with the weak expedients of "busy work."

The work of the primary schools of La Porte, Ind., is based on this principle. This city exhibited a thoroughly systematic display of the manual phases of its work, in which kindergarten material is largely used. The following were the chief features of this display:

1. A series of exercises with "Second Gift Beads," as strung by the children, in lessons on counting, addition, subtraction, multiplication, division, and part-taking. The beads differ in color and shape, and afford endless opportunities for suitable arithmetical exercises.

2. Exercises with the folding-sheet in its three forms (square, triangular, and circular), developing clear notions and ready control of elementary geometrical forms and relations.

3. Exercises with card-board in the representation of solid forms

of given shape and dimensions. Prominent among these exercises was a cubic-foot built with a number of two-inch cubes, manufactured by two classes of a fifth grade; and a card illustrating the cubes of 1–4, constructed with one-inch cubes by the same class.

4. Exercises with clay in the construction and ornamentation of solids and variously-shaped tiles of given dimensions. These exercises are made systematically helpful in drawing, painting, and form-lessons.

5. Exercises with the folding-sheet in drawing. The creasing furnishes a variety of net-works which aid the child in its inventions of designs, and add a new zest to the various exercises in automatic drawing.

In all of these, as well as in a number of exercises not mentioned here, aim and mode of procedure are not those of the kindergarten, but are adapted to the needs of the child at the higher stage of development corresponding with its advanced age.

A novel and important feature of this work can only be mentioned here It is the *group-work* which presents a variety of designs in splints, dots, tablets, and paper, belonging in conception and execution to several children. These designs are prepared on square or hexagonal tables by groups of four or six children who are the joint owners of the work. These exercises, while they prove a great aid in the lessons on form, color, number, and size involved in them, are intended to arouse, at the same time, a keen sense and appreciation of the value of common effort; they hold the germ of a new departure in education, for the development of which, however, our age is scarcely ripe.

The exhibits of kindergartens, pure and simple, were few, probably on account of the effort made for a full exhibit at Madison last summer. Fortunately, however, the few gave a fair idea of the high status of the kindergarten in the United States.

Foremost among these exhibits, the display made by Mrs. Harriet Donovan, directress of the kindergarten and kindergarten training department of the State Normal School at Winona, Minn., gave proof of the full entrance of a ne wspirit in the work,—a truly American spirit, which, placing itself on the ground of broad principles, and drawing upon its own native resources, means to look beyond the achievements of the "authorities," and to work for its own ends and ideals. The development of the kindergarten in the United States has been much hampered by an unfortunate tendency to copy, by narrow efforts to understand somebody else, and then to repro-

duce that somebody as nearly as possible. Thus it happened that imperfect conceptions of the successive models became progressively, or, rather, retrogressively, blurred by the native weaknesses of the copyists, and the kindergarten was in great danger of drifting into a hopeless inefficiency. From this danger it will be saved by this new spirit which comes, like another declaration of independence, to cut the work loose from morbid old-world traditions, and to place it on the high vantage-ground of a broad humanity that fears no man and worships God in the culture of the heaven-born possibilities of its own nature. The same spirit was manifest in much of the work shown at Madison, and there can be no doubt that its sway is rapidly becoming supreme.

The Winona exhibit consisted chiefly of work in the ordinary paper occupations,—folding cutting, and pasting, weaving and interlacing. In all of this it gave evidence of an unusual degree of freedom in the play of originality, of more than ordinary clearness in conception and dexterity in execution, of a high development of the æsthetic sense in the handling of shape and color, and of unquestionable growth in habits of accuracy, neatness, and pains taking conscientiousness.

Much praise is due to Mrs. Ogden for the manner in which she conducted the actual kindergarten established in the gallery by the Bureau of Education. In its external appointments the kindergarten was not abundantly supplied, and gave full play to the kindergartner's skill in making much of little. A small, well-lighted room, partitioned off in a corner of the gallery, furnished with a number of Mrs. Hailmann's group-tables, a piano, chairs, and a closet for a scanty supply of material, constituted the entire outfit. But Mrs. Ogden, by breathing into this the spirit of child-love, made it a genial, sunny spot for vigorous, healthy, joyous child-growth. Thus the very shortcomings of her surroundings enabled her to make a better display of the inner value of her work, and the very weakness of her outfit helped to bring out the strength that lies in Froebel's thoughtful love of childhood.

Although, at the time of my visit, the Exposition was in the second half of its allotted life, the extensive exhibit of the Froebel Institute of North America and a number of smaller exhibits of kindergarten work from different parts of the United States, were still in a chaotic and neglected condition, which precluded inspection. As executive officer of the Froebel Institute, I deemed it my duty to rescue its exhibit from dust and confusion. It represents

the first successful effort to bring before so large a public the possibilities of the *gifts*, with some degree of completeness and in logical arrangement. In orderly sequence it presents the life forms and symmetry forms of the 3d, 4th, 5th, and 6th gifts; similar forms of the different kinds of tablets, the splints and dots, more especially in social or group-work; and the number and color-forms of the second-gift beads.

Among foreign exhibits of kindergarten work those of France and Japan were unusually rich and instructive. In France the *Ecole Maternelle* forms a part of the public school system, and has in its methods, at least, much that reminds of the kindergarten. In origin and organization it is, indeed, more a day-nursery; it receives children between the ages of two and seven, it is open on every working-day of the year, and its sessions last the whole day; even its plays and occupations look almost exclusively to the narrowly material pursuits of bread-winning, to mere industry. Yet there is in the gradual adoption of Froebel's occupations, in the attention paid to the physical comfort of the children, in the careful preparation of the teachers, and in the stress laid upon mind and heart-culture much that merges into the kindergarten.

The exhibit of the *Ecole Maternelle*, like the rest of the externally magnificent educational exhibit of France, showed more clearly than words could have done the status of the nation. The traditions of her history and the jealousies of sister-nations still hold her back in a barbarous, military civilization which she pants to escape; her comparatively limited resources, and the great burden of self-preservation, aggravated by the fear and hatred of her neighbors, force her into an intensity of the bread-winning activities,—even her art seems to be chiefly bread-winning, — which precludes thoughtful attention to the deeper, more joyous phases of life; her exertions of strength, through the force of circumstances, are so much bent on self, individual and national, that she has but scanty opportunities to realize the love of man and God that glows in her inmost being, and is leading her to a glorious destiny.

The Japanese exhibit was interesting through the patient, conscientious following of which it gave evidence. The kindergarten at Tokio which sent these articles is under the leadership of a German lady, and is clearly a fuller and faithfuller representation of the German conception of Froebel's thought than Germany herself could produce. Everything is done in accordance with strict rule; there are none of the indocilities, negligences, and self-willed new de

partures that characterize the Anglo-Saxonwork in this field. The same docility and perfect abandonment of self to the work in hand is announced, too, in the subdued tones and perfect blending of the colors used, which are in strange contrast with the loud and insolent hues that lent magnificence to the Mexican and Russian exhibits close by. The account given of this Japanese kindergarten by Prof. L. W. Mason made this exhibit vastly more significant as a touching proof of the singleness and intensity of purpose with which the Japanese people are striving for a higher form of civilization.

On the whole, the friends of education have reason to rejoice at the general character of the New Orleans exhibits in the department of the kindergarten. They indicate progress along the whole line. The kindergarten, as such, has been clearly raised from its former questionable isolation into the genial and friendly companionship of established educational forces; the principles of harmonious culture, of which it is now gratefully recognized to be the fullest and most helpful exponent, are more and more completely adopted in all educational work; and the time seems to be rapidly approaching when the kindergarten will be in our public schools the indispensable starting-point of an educational system, built on the broad principles and consciously striving for the lofty aims of Froebel.

W. N. Hailmann.

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